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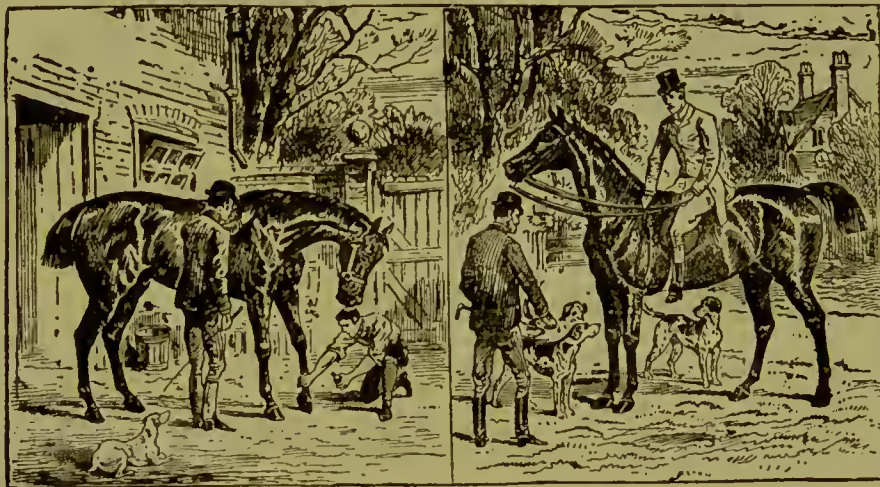
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J. A. JORDAN, 44 Low Hill, Liverpool, Sept. 4th, 1888.

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"W. CHATER LEA, North Road Cycling Club, August 22nd, 1888."

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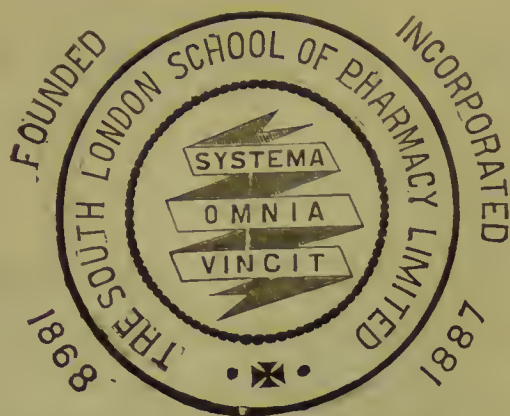
The Practitioner, November, 1888.

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All at their first attempt.

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At the last Pharmaceutical Examinations 8 Major Candidates from this School presented themselves, 6 passed. The following 35 Minor Students were also successful.

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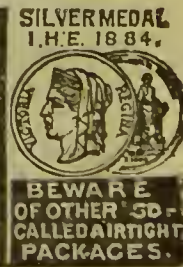
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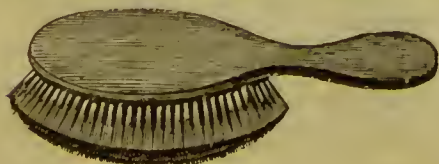
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Wills's books, *Materia Medica* specimens, and apparatus; exchange anything. Jarvis, Dispensary, Devizes.
Set of illegible autograph prescriptions (original) 2s. 6d., as presented to the Pharmaceutical Society of Ireland for their examinations; 30 prescriptions (catch and difficult) given to dispense at Minor during past twelve months, 2s.; 50 questions asked of successful students at last Minor, 1s. 1d.; new "Pharmacopœia," 5s.; lot of cheap, almost new, books; Atfield's "Obstetrics," 1886, 12s.; Squire's "Companion," 1886, 8s. 6d.; carriage paid; stamp for list. Saunders, Medical Tutor, 6 Rochester Square, N.W.

Literature.

Pharmaceutical Journal, 1841 to 1881; *Chemist and Druggist*, 1881 to 1887; what offers? Griffith, Leamington.
Pharmaceutical Journal, bound in yearly volumes and in good condition, from 1870 to 1884, 15 volumes in all. Maurice, 34 Bedford Street, Plymouth.
Proctor's "Pharmacy," 2nd edition, for Wills's "Materia Medica" (latest), or sell 8s. Dunlop, Dr. Scott, Tollcross, Glasgow.
20 half-crown copies of "Frederick the Noble," by Sir Morell Mackenzie, 1s. 9d. each, post free. Hardy, Chemist, Salisbury.

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Reliable recipes, 6d. each; full set of 130 neatly copied in book, 7s. 6d.; send for list. "Chemist," Edwards, Wye, Kent.
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Soluble essences (non-alcoholic, for mineral waters): lime-juice cordial; chlorodyne (perfectly transparent); cascara sagrada cordial; concentrated waters (1 to 40); essence rennet (permanent, no salt); hop bitters; liquor carbonis (resembles Wright's); chemical liquors for syrups (stable); lac rosarum (inseparable, made in few minutes); ink (resembles "Dichroic"), elixir phosphori, invigorating tonic; sponges bleached (golden yellow); liquid dentifrice (like "Floriline"); marking-ink, *sine* silver, writing executed defies chemicals; saline (Luo's or Lamplough's); magle uenralgio drops; lime-juice and glycerine (white as milk, inseparable); pill-coating, pearly white, no mastic or mucilage; crimson marking-ink; hair-restorer, colourless, no deposit, *sine* silver; oleum flavum concentratum, stable colour for pomades; soluble ginger (like Hay's); liquor copaitæ comp. e. bacchu et matico (like Richardson's); liquor santal. flav. (resembles Hewlett's); taraxacum podophyllin, iron quinine (both resemble Pepper's); many perfumes, also toilet requisites; static wants; lists issued; all inexpensive to prepare; 5s. each (5 for 14); analyses undertaken. Readers are warned against cheap substitutes. I was first to advertise formulæ in this journal. "Analyst," Mr. Barnes, 6 Rochester Square, N.W. (Only prepaid inquiries answered.)

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What offers for 51-in. square set of 84 oak drawers, satin-wood fronts? Kendall, Blyth.

Glass counter case, length 36 in., width 18 in., height 8 in., with mahogany shelf, in splendid condition; also 3 small carboys; what offers? "Chemist," 441 High Road, Chiswick.

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12-ft. run mahogany-fronted (60) drawers, glass labels and knobs, 6l. 15s.; 8 ft. plate-glass counter-case, fig. A 18, 6l. 10s.; ditto, 6 ft. long, 5l.; ditto, 5 ft. 6 in. long, 4l. 15s.; 4 ft., as A 17, 3l. 15s.; 3 ft., as A 16, 55s.; also a 2 ft. 9 in. by 3 ft. long, 3 ft. 6 in. long, and 4 ft. long, as Maw's fig. A 6, from 30s. each; several outside lamps cheap. Elkanah Natall, 207 Old Street (Shoreditch end), London, E.C. Established 20 years.

A quantity of second-hand shop drawers, both mahogany and pine fronts, in nests, from 3 ft. to 12 ft. long, at 1s. 3d. per drawer; 12 ft. wall fixture lockers, drawers (gold labelled and glass knobs), shelving, cornice, 8l.; 11 ft. mahogany-fronted counter, 6 ft. ditto; 7 ft. plate-glass case-fronted counter, mahogany top; mahogany top counters, stained pine fronts, 5s. 6d. per foot run; 6 ft. plate-glass counter case, A18, 5l. E. Natall, 207 Old Street (Shoreditch end), London.

Desk and case, 45s.; 3 ft. bent plate-glass counter case, 45s.; a number of bent plate-glass counter cases from 15s. per foot run, send size required; dispensing screens, silvered plate-glass centre, very elaborate, 6 ft. long, 6l. 10s.; ditto as figs. A54 and A55 Maw's list, 3 ft. long, 4 ft., 5 ft., and 6 ft. long, from 65s. each; sponge cases, A41, 60s., A43, 95s.; a very elaborate counter case, fig. A4, 5l. Elkanah Natall, 207 Old Street (Shoreditch end), London, E.C.

30 doz. shop rounds, 40-oz., 20-oz., 10-oz., 7s. 6d. doz.; pink olutment jars, gold labelled; apocia jars, 35s. each, royal arms, gold covers, new; carboys, 4 and 6 gall.; mortars, scales, measures, pill-machines at very low prices to clear out surplus stock. Elkanah Natall, 207 Old Street (Shoreditch end), London.

For sale, a bargain, the entire fittings of a West-end shop, only in use two years, together or separate; 27 ft. run mahogany-fronted drawers (glass knobs, bevelled-edge labels), lockers under, mahogany cover-beard, mahogany pilasters and shelving with cupboards, silvered plate-glass doors between shelves and mahogany cornice over; 10 ft. cupboard, fitted inside with shelves, with pilasters, shelving, and cornice to match the 27 ft. run; 17 ft. Spanish mahogany counter, fitted with drawers; plate-glass dispensing screen, with plate-glass counter under, with sponge case in centre, marble top; bent plate-glass counter-case, desk, and glass case; all equal to new, 60l. Elkanah Natall, 207 Old Street (Shoreditch end). Established 20 years.

Very handsome range of mahogany drawers, with glass labels, 10l.; neat range of pine drawers, with cupboard, 15 feet long, 8l. 5s.; very handsome 6-ft. dispensing screen, with mirror, clock, and marble slab in centre, 10l.; handsome dispensing screen, 6 ft. long, mirror centre and marble slab, 5l. 10s.; ditto, new design, 7l.; 180 gold-labelled bottles, jars, and syrups, new, 8l. 10s.; desk and glass case, 45s.; ditto, 55s.; bent-front brush case, 21s.; ditto, 25s.; bent-front counter-case, 6 ft. long, 5l.; flat plate-glass ditto, 3 ft. long, 35s.; desk with mirror in front, 30s.; 24 best pink shop jars, 4 lb., gold labelled, 4s. 3d. each; 12 3 lb. blue ditto, labelled, 2s. each; 4 4-gallon carboys, 10s. each; 6 3-gallon ditto, 7s. 6d. each. R. Tomlinson & Sons, Bond Street, Birmingham.

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Covered pots, white, all sizes, 9s. gross. 158/12. Good soluble gum, 5d. and 7d. "Pharmacy," 295 Old Street, E.C.

1,000 gross earthenware unions for feeding bottles, 2s. gross; post free. 153/12.

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Surplus stock.—2-oz. bottles virgin otto, green label; Howards' quinine, ounce bottles; also unbleached ounce; large quantity fine loofahs; clean saleable patents wanted. N., 390 Strand, London.

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Thoroughly good microscope, perfect. Particulars, Campbell, Brunswick Square, Gloucester. Scales, as Maw's fig. 4; four 4-gal. carboys, with or without stands, pear shape. Amore, Castle Street, Hastings.

Nest of drawers, 8 by 3; scales as Maw's, No. 4; tincture-press; root-cutter; powder-folder. 145/15.

Atfield's "Chemistry," Wills's "Materia Medica," last edition; good condition. Tatler, Preston Street, Hanley.

Twelve 6-in. covered plank shop jars; Southall's cabinet; percolator; "Martindale," latest; pessary mould; few 30-oz. capped oil bottles. 165 Hagley Road, Birmingham.

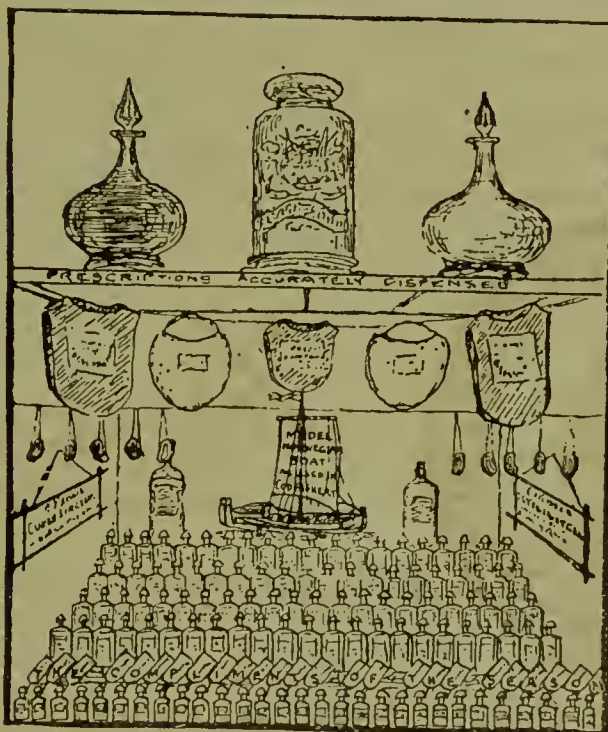
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"In this sketch dummy bottles of Cod Liver Oil are the leading articles displayed; above these is one of Southall's Cod Fishing Boats."

"Whilst all contributors are thanked for their assistance, we award the prize of one guinea to Mr. F. Smith."

These boats are intended for the interior of shops and windows as an attraction and advertisement for the "A1" Oil; the price fixed is very moderate—namely, 10s. each. As frequent applications have been made to us for the Boats for other purposes, we find it necessary to state that the Boats are only supplied to purchasers of the Oil.



These Models, made specially for us in Norway, are very picturesque, well built, and behave admirably in water. Each boat possesses oars, in addition to its sail, and is complete in every respect. It is also fitted with a cabin on deck, as used by the fishermen in travelling from their homes to the fishing ground. They measure 28 inches from stem to stern, and 32 inches to top of mast.

It will be seen that the main feature in the successful design is the massing of "A1" Cod Liver Oil in bottles, backed by the Model Boat and a Winchester Quart of Oil on each side of it.

8-oz. Dummy Bottles, labelled with the "En Norsk Fisker" label, in colours, for window-dressing, supplied at 18/- per gross.

THE "A1" COD LIVER OIL

TRADE MARK.

Manufactured at our own factory, Balstad, Norway.

7/- per gallon in Winchester Quarts; 12 Winchester, 6/9; 36 Winchester, 6/6 to account.

NOW IN THE PRESS, an Illustrated BROCHURE of "Norwegian Manners and Customs," with many interesting particulars of the Cod Fisheries. Copy sent post free to any Chemist on receipt of stamped postal wrapper.

SOUTHALL BROTHERS & BARCLAY, BIRMINGHAM
 (And Balstad, Norway).

EXCHANGE COLUMN.

This section of "The Chemist and Druggist" must be closed for press by Thursday noon of each week. Remittances payable to EDWARD HALSE.

DEPOSIT OF MONEY.—In order to ensure safety we offer the following system:—The purchaser of anything advertised in the Exchange Column may remit the amount to us, accompanied by a commission of 6d. if the amount is £3 or under; and 1s. if over that sum. We acknowledge receipt of deposit to both parties, and hold the money until we are satisfied that either the goods are returned to their original owner or the purchase is completed.

Postal orders and cheques sent as deposit must be made payable to Edward Halse, and crossed "Martin & Co."

FOR DISPOSAL.

Drugs and Chemicals.

Blaud's pills, Richardson's, 10 gross tins, post free, 5s. 6d. Wylie, Chemist, College Street, Edinburgh.

Educational.

Wills's books, *Materia Medica* specimens, and apparatus; exchange anything. Jarvis, Dispensary, Derizes.

Set of illegible autograph prescriptions (original) 2s. 6d., as presented to the Pharmaceutical Society of Ireland for their examinations; 30 prescriptions (catch and difficult) given to dispense at Minor during past twelve months, 2s.; 50 questions asked of successful students at last Minor, 1s. 1d.; new "Pharmacopœia," 5s.; lot of cheap, almost new, books; Atfield's "Obemistry," 1886, 12s.; Squire's "Companion," 1886, 8s. 6d.; carriage paid; stamp for list. Saunders, Medical Tutor, 6 Rochester Square, N.W.

Literature.

Pharmaceutical Journal, 1841 to 1881; *Chemist and Druggist*, 1881 to 1887; what offers? Griffith, Leamington.

Pharmaceutical Journal, bound in yearly volumes and in good condition, from 1870 to 1884, 15 volumes in all. Maurice, 34 Bedford Street, Plymouth.

Proctor's "Pharmacy," 2nd edition, for Wills's "Materia Medica" (latest), or sell 8s. Duhalp, Dr. Scott, Tolleross, Glasgow.

20 half-crown copies "Frederick the Noble," by Sir Morell Mackenzie, 1s. 9d. each, post free. Hardy, Chemist, Salisbury.

Formulæ.

Reliable recipes, 6d. each; full set of 130 neatly copied in book, 7s. 6d.; send for list. "Chemist," Edwards, Wye, Kent.

Money without risk!—Send 1s. 6d. postal order for any three undermentioned. List 400 post free:—"Corn Cure," wonderful results, warranted best sold; "Bronchialiser," safe, certain remedy for colds and chest affections; "Chilblain Remedies," cleanly, rapid, and efficacious, cheap and elegant; "Gout Mixture," speedily cures, without danger, dram doses; "Glycerine Cream," grandest lotion ever used for frostbites, roughness or redness of skin, very cheap, but wonderfully nice, sure to sell. T. Brooks, Chemist, Louth, Lincs.

Soluble essences (non-alcoholic, for mineral waters); lime-juice cordial; chlorodyne (perfectly transparent); cascara sagrada cordial; concentrated waters (1 to 40); essence rennet (permanent, no salt); hop bitters; liquor carbouis (resembles Wright's); chemical liquors for syrups (stable); lac rosurum (inseparable, made in few minutes); ink (resembles "Dichroic"), elixir phosphor, invigorating tonic; sponges bleached (golden yellow); liquid dentifrice (like "Floriline"); marking-ink, *sine* silver, writing executed dross chemicals; saline (Luo's or Lamplough's); magio neuralgic drops; lime-juice and glycerine (white as milk, inseparable); pill-coating, pearly white, no mastic or mucilage; crimson marking-ink; hair-restorer, colourless, no deposit, *sine* silver; oleum flavum concentratum, stable colour for pomades; soluble ginger (like Hay's); liquor copalme comp. o. Bachu et matico (like Richardson's); liquor santal. flav. (resembles Howlett's); taraxacum podophyllin, iron quinine (both resemble Pepper's); many perfumes, also toilet requisites; state wants; lists issued; all inexpensive to prepare; 5s. each (5 for 14.); analyses undertaken. Readers are warned against cheap substitutes. I was first to advertise formulæ in this journal. "Analyst," Mr. Warner, 6 Rochester Square, N.W. (Only prepaid laquies answered.)

Dental.

Second-hand Owen dental chair. Apply, 162/29.

Dental show case and specimens for sale, price 4l. Waterhouse, Ramsgate.

Shop Fittings.

What offers for 51-in. square set of 84 oak drawers, satin-wood fronts? Kendall, Blyth.

Glass counter case, length 36 in., width 18 in., height 8 in., with mahogany shelf, in splendid condition; also 3 small carboys; what offers? "Chemist," 441 High Road, Chiswick.

Counter, solid mahogany top and front, fitted behind with drawers, 13 ft. long, price 10l. Philip Josephs, 54 Old Street, Goswell Road, London.

Show-cases for counter, bent plate-glass, 6 ft. long, as Maw's A18, price 5l. 10s. Philip Josephs, 54 Old Street, Goswell Road, E.O.

Nests of drawers, 4 ft. dispensing screen, desk, and a quantity of glass cases, glass shelves, tapped bars and brackets for windows, for sale cheap. Philip Josephs, 54 Old Street, Goswell Road, London.

Show-case, double end, for window or counter, 2 ft. long, 14 ft. high, 2 ft. wide, top part with plate-glass shelf and bottom with trays, silvered-glass backs, price 70s., cost more than double. Philip Josephs, 54 Old Street, Goswell Road, E.C.

For disposal, the following cheap lines dispensing bottles:—12 gross 20-oz. ovals, 14s. per gross; 6 gross 18-oz. ovals, 12s.; 50 gross 16-oz. ovals, 12s.; 60 gross 10-oz. ovals, 10s.; 16 gross 5-oz. ovals, 6s.; 3 gross 24-oz. flat, 16s.; 35 gross 12-oz. flat, 11s.; 3 gross 16-oz. flat 20s.; 3 gross 12-oz. flat 11s.; 1 gross 16-oz. actinic green, round shouldered, 7s.; 5 gross 20-oz. green corbys, 18s. Whitehead & Co., 81 Bloomsbury, Manchester.

12-ft. run mahogany-fronted (60) drawers, glass labels and knobs, 6l. 15s.; 8 ft. plate-glass counter-case, fig. A 18, 6l. 10s.; ditto, 6 ft. long, 5l.; ditto, 5 ft. 6 in. long, 4l. 15s.; 4 ft., as A 17, 3l. 15s.; 3 ft., as A 16, 55s.; also a 2 ft. 9 in. by 3 ft. long, 3 ft. 6 in. long, and 4 ft. long, as Maw's fig. A 6, from 30s. each; several outside lamps cheap. Elkanah Natani, 207 Old Street (Shoreditch end), London, E.C. Established 20 years.

A quantity of second-hand shop drawers, both mahogany and pine fronts, in nests, from 3 ft. to 12 ft. long, at 1s. 3d. per drawer; 12 ft. wall fixture-lookers, drawers (gold labelled and glass knobs), shelving, cornice, 8l.; 11 ft. mahogany-fronted counter, 6 ft. ditto; 7 ft. plate-glass case-fronted counter, mahogany top; mahogany top counters, stained pine fronts, 5s. 6d. per foot run; 6 ft. plate-glass counter case, A18, 5l. E. Natani, 207 Old Street (Shoreditch end), London.

Desk and case, 45s.; 3 ft. bent plate-glass counter case, 45s.; a number of bent plate-glass counter cases from 15s. per foot run, sand size required; dispensing screens, silvered plate-glass centre, very elaborate, 6 ft. long, 5l. 10s.; ditto as figs. A54 and A55 Maw's list, 3 ft. long, 4 ft., 5 ft., and 6 ft. long, from 65s. each; sponge cases, A41, 60s., A43, 95s.; a very elaborate counter case, fig. A4, 5l. Elkanah Natani, 207 Old Street (Shoreditch end), London, E.O.

30 doz. shop rounds, 40-oz., 20-oz., 10-oz., 7s. 6d. doz.; pink ointment jars, gold labelled; speckle jars, 35s. each, royal arms, gold covers, new; carboys, 4 and 6 gall.; mortars, scales, measures, pill-machines at very low prices to clear out surplus stock. Elkanah Natani, 207 Old Street (Shoreditch end), London.

For sale, a bargain, the entire fittings of a West-end shop, only in use two years, together or separate; 27 ft. ran mahogany-fronted drawers (glass knobs, bevelled-edge labels), lockers under, mahogany cover-board, mahogany pilasters and shelving with cupboard, silvered plate-glass doors between shelves and mahogany cornice over; 10 ft. cupboard, fitted inside with shelves, with pilasters, shelving, and cornice to match the 27 ft. run; 17 ft. Spanish mahogany counter, fitted with drawers; plate-glass dispensing screen, with plate-glass counter under, with sponge case in centre, marble top; bent plate-glass counter-case, desk, and glass case; all equal to new, 60l. Elkanah Natani, 207 Old Street (Shoreditch end). Established 20 years.

Very handsome range of mahogany drawers, with glass labels, 10l.; neat range of pine drawers, with cupboard, 15 feet long, 8l. 5s.; very handsome 6-ft. dispensing screen, with mirror, clock, and marble slab in centre, 10l.; handsome dispensing screen, 6 ft. long, mirror centre and marble slab, 5l. 10s.; ditto, new design, 7l.; 180 gold-labelled bottles, jars, and syrups, new, 8l. 10s.; desk and glass case, 45s.; ditto, 55s.; bent-front brush case, 21s.; ditto, 25s.; bent-front counter-case, 6 ft. long, 5l.; flat plate-glass ditto, 3 ft. long, 35s.; desk with mirror in front, 30s.; 24 best pink shop jars, 4 lb., gold labelled, 4s. 3d. each; 12 3 lb. blue ditto, labelled, 2s. each; 4 4-gallon carboys, 10s. each; 6 3 gallon ditto, 7s. 6d. each. R. Tomlinson & Sons, Bond Street, Birmingham.

Miscellaneous.

Covered pots, white, all sizes, 9s. gross. 153/12. Good soluble gum, 5d. and 7d. "Pharmacy," 295 Old Street, E.C.

1,000 gross earthenware unions for feeding bottles, 2s. gross; post free. 153/12.

Small fox terrier and good black retriever, both splendid dogs, good house protectors. Doubleday, Dorking.

Popular microscope-slides, 5s. dozen; list; approval; exchange for stereoscope slides or Remington's "Pharmacy." Henry Ebbage, 344 Caledonian Road, London.

Two 1-gal. carboys, cheap; pill machine; 6-pint bell-metal mortar and pestle, good condition; platform machine, to weigh to 3 cwt.; what offers? Gower, Berkeley.

Two window reflectors, 16 and 18-in. diameter, square, good condition, but one has crack across; making room for much larger; the two for 25s. Wesley Jones, Llanelly.

Surplus stock.—2-oz. bottles virgin otto, green label; 11-wards' quinine, ounce bottles; also unbleached ounce; large quantity fine loofahs; clean saleable patents wanted. N., 390 Strand, London.

Wanted, reasonable offers for the following, all of which are entirely new:—2 2-gallon swan-neck carboys, with stands; dispensing screen, "Prescriptions Prepared," with mirror, 5 ft. by 18 in., gas stove, and writing desk. West, 12 The Grove, Ealing.

WANTED.

Copies of *The Chemist and Druggist* for December 1 and 15, 1888; 4d. given for same. 21/89. Mixing-machine, to hold half-hundredweight. Full particulars to Pearson, Chester.

Thoroughly good microscope, perfect. Particulars, Campbell, Brunswick Square, Gloucester.

Scales, as Maw's fig. 4; four 4-gal. carboys, with or without stands, pear shape. Amore, Castle Street, Hastings.

Nest of drawers, 8 by 3; scales as Maw's, No. 4; tincture-press; root-cutter; powder-folder. 145/15.

Atfield's "Chemistry," Wills's "Materia Medica," last edition; good condition. Tatler, Lyonnet Street, Hailey.

Twelve 6-in covered pink shop jars; Soutball's cabinet; percolator; "Martindale," latest; pessary mould; few 30-oz. capped oil bottles. 165 Hagley Road, Birmingham.

"CHEMIST AND DRUGGIST" POST-CARD COMPETITION FOR WINDOW-DRESSING.

PRIZE SKETCH

BY

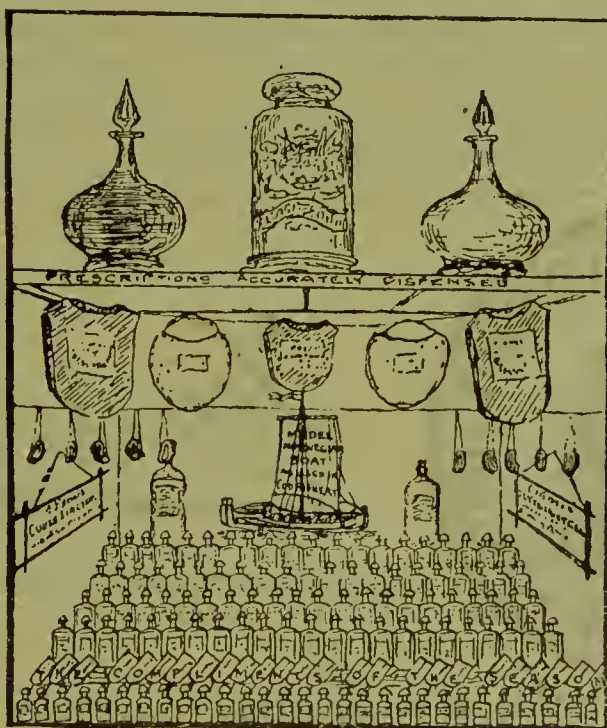
Mr. F. SMITH, 196 HIGH STREET, DEAL.

EXTRACT FROM "CHEMIST AND DRUGGIST"—

"In this sketch dummy bottles of Cod Liver Oil are the leading articles displayed; above these is one of Southall's Cod Fishing Boats."

"Whilst all contributors are thanked for their assistance, we award the prize of one guinea to Mr. F. Smith."

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SOUTHALL BROTHERS & BARCLAY, BIRMINGHAM

(And Balstad, Norway).

TOWER TEA.

A MOST VALUABLE AGENCY.

TOWER TEA.—Only the choicest kinds, selected from the London import market, are used. Absolute reliance can be placed on its perfect purity and uniform high quality.

TOWER TEA.—Used by thrifty housekeepers; sold by enterprising agents in every town in the United Kingdom, who find it a profitable Agency.



Tower Tea

Registered Trade Marks, Nos. 44,027 and 43,992.

NOTE. THE ABOVE TRADE MARKS APPEAR ON EVERY PACKAGE.

TOWER TEA.—HUNDREDS OF TESTIMONIALS from all parts of the kingdom speak to the excellent character of this Tea, its popularity with all classes, and the high value of the Agency. A representative selection of these testimonials has been published, and can be had on application, with samples of undermentioned Teas; also the little pamphlet, "A Short History of Tower Tea"; and the book of pictures, "Voyage and Adventures of Ah-Chin-Chin" (1s.).

TOWER TEA, 1s. 4d. per lb. (retail price) Sound Wholesome Tea.

TOWER TEA, 1s. 8d. " " Powerful Tea, whole and semi-leaf.

TOWER TEA, 2s. " " Fine First Crop Tea, from India, China, and Ceylon.

WHERE VACANCIES MAY EXIST, AGENTS ARE APPOINTED BY

THE GREAT TOWER STREET TEA CO., LD.
3 JEWRY STREET, LONDON, E.C.

TO THE TRADE.

It is our intention to appoint an Agent for our SPRING BLOSSOM CEYLON TEA in every Town and Village in the United Kingdom, and we are OPEN TO APPOINT AGENTS WHERE NOT already represented.

READ THE FOLLOWING UNSOLICITED TESTIMONIALS.

ORIGINALS MAY BE SEEN AT OUR OFFICE.

- Dec. 11, 1888.—“I find the sale is increasing every week, and my customers all say they like it.”
- Dec. 8, 1888.—“I find the ‘Spring Blossom’ still holds its own, and gets me new customers by recommendation, which is a most pleasing fact. Once tried invariably used.”
- Nov. 29, 1888.—“ . . . in conclusion, I may say that we have been in the grocery line over 17 years, and we have never found any Teas to equal yours, value for value.”
- Oct. 30, 1888.—“I find the ‘Spring Blossom’ gives general satisfaction.”
- Oct. 23, 1888.—“It is taking very well in this quarter, and everyone seems very well pleased with it.”
- Oct. 16, 1888.—“My trade in ‘Spring Blossom’ is increasing.”
- Sept. 26, 1888.—“My customers say it is the best Tea they ever drank at the price.”
- Sept. 4, 1888.—“The ‘Spring Blossom’ is selling very well.”
- Aug. 20, 1888.—“I am glad to say it continues to give great satisfaction, and I am gaining a number of new customers by the sale of it.”
- Aug. 13, 1888.—“The Tea is much liked, and always asked for, when once tried.”
- Aug. 7, 1888.—“I am pushing it all I can.”
- July 27, 1888.—“I have tried the sample (‘Spring Blossom’) you were good enough to send, and find it an excellent blend.”
- July 16, 1888.—“It sells well.”
- July 18, 1888.—“I don’t want to introduce any other package as long as yours please so well.”
- June 4, 1888.—“I find the Tea very good value, and customers like it.”
- June 8, 1888.—“We find the demand increasing.”
- April 30, 1888.—“This Tea seems to take very well in this town.”
- April 30, 1888.—“I think I shall be able to sell this Tea when it gets known.”
- April 27, 1888.—“I have now quite a number of customers who get it regularly, and say they prefer it to any other kind.”
- April 20, 1888.—“It has taken well at my branch . . . and I think I will try it here, too.”
- April 16, 1888.—“My customers say that it is the best Tea I have had.”
- April 16, 1888.—“It is only fair to acknowledge the fact that I can get no Teas equal to yours.”
- April 13, 1888.—“It is very good, and I wish to say it is the best Tea I ever had.”
- April 10, 1888.—“Our customers like it and recommend it.”
- April 3, 1888.—“We have got your Tea started here, and it gives satisfaction to everyone who tries it.”
- March 31, 1888.—“I find fresh customers every week, and it gives great satisfaction.”
- March 21, 1888.—“The Tea is liked well, getting fresh customers every day.”
- Feb. 27, 1888.—“Great inquiries for this Tea.”
- Feb. 25, 1888.—“I find the ‘Spring Blossom’ is rapidly gaining favour and gives universal satisfaction.”
- Feb. 19, 1888.—“All say they never tasted better Tea.”
- Feb. 13, 1888.—“The ‘Spring Blossom’ Tea is taking well with my customers.”
- Feb. 10, 1888.—“I may say that the customers who have tried it speak in great praise of it, and will have no other.”
- Jan. 24, 1888.—“The sale of your ‘Spring Blossom’ Ceylon Tea is increasing, and appears to give much satisfaction.”
- Jan. 9, 1888.—“I may for your information tell you that your Ceylon Tea gives general satisfaction.”
- Nov. 21, 1887.—“It is selling pretty freely with us.”
- Nov. 21, 1887.—“I might add that the sale of your Tea is gradually increasing, and is much approved of.”
- Oct. 12, 1887.—“The Tea as per samples was really good.”
- Oct. 6, 1887.—“I have tried the Tea and like it very much.”
- Sept. 16, 1887.—“The Tea seems to give satisfaction.”
- Aug. 6, 1887.—“This Tea gives great satisfaction.”
- July 15, 1887.—“We like the Tea much.”
- July 6, 1887.—“I have been well pleased with your last Tea. I will very soon give you a good order.”
- May 25, 1887.—“It goes well here.”
- April 12, 1887.—“I have thoroughly tested your Teas amongst my customers, and I believe that I shall be able to do a very good trade for you.”

Packed in Circular Air-tight Canisters, to sell Retail at 2/-, 2/6, & 3/- per lb.

Tasting Samples and Terms post free, or set of three 1/4-lb. Samples post free for 2/- in Stamps.

CAVE, JOHNSON & CO., WHOLESALE TEA & COFFEE DEALERS, 8 LIME ST., LONDON, E.C.

BLENDED WAREHOUSES—1 FENCHURCH AVENUE, E.C.

Bankers—Messrs. WILLIAMS, DEACON & CO.

Telegraphic Address CAVE JOHNSON LONDON.”

THE BEST NATURAL APERIENT.

The APOLLINARIS COMPANY, LIMITED, London, beg to announce that, as numerous Hungarian Aperient Marks, Names, and Designations used for the Hungarian Aperient imported by them, they have now their own, comprising their selection, which

A RED

This Label will henceforth serve APERIENT WATER SOLD BY THE COM-

Waters are offered to the public with very similar to those which are Water (Hunyadi János) so long adopted an additional Label of Registered Trade Mark of consists of

DIAMOND.

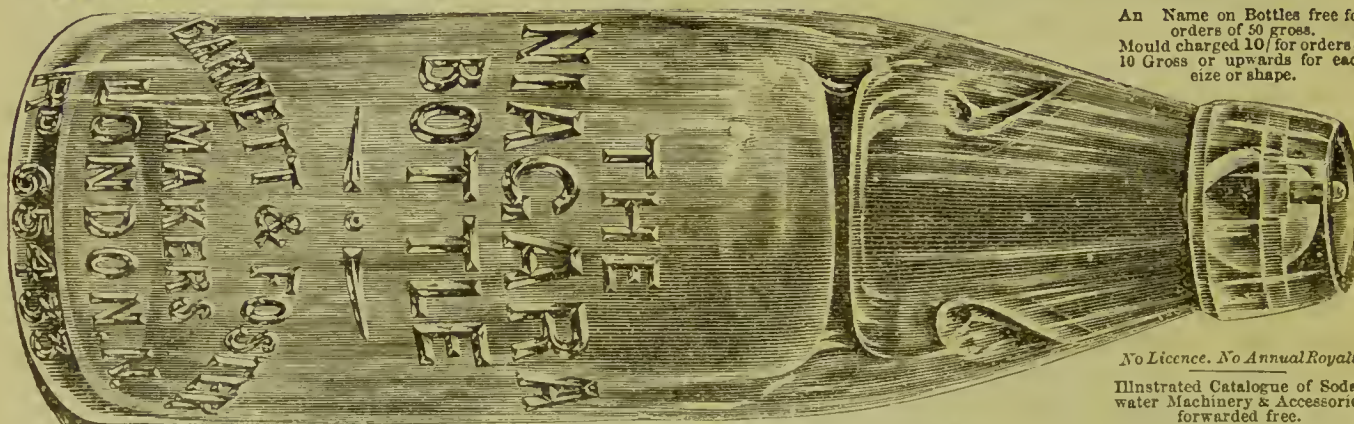
to distinguish the HUNGARIAN APERIENT WATER from all other Aperient Waters.

DEMAND THE DIAMOND MARK,

and insist upon receiving the HUNGARIAN APERIENT WATER of the APOLLINARIS COMPANY, LIMITED, London.

Of all Druggists and Mineral Water Dealers.

THE "NIAGARA" GLOBE-STOPPERED BOTTLE.



An Name on Bottles free for orders of 50 gross. Mould charged 10/ for orders of 10 Gross or upwards for each size or shape.

No Licence. No Annual Royalty. Illustrated Catalogue of Soda-water Machinery & Accessories forwarded free.

Present Prices, net:—SPLITS, 14/, FULL SIZE, 16/ per Gross, including Bings. 12 and 14 oz., 1/; 16 oz., 2/ extra per Gross. At our Works, LEEDS, YORKSHIRE.

EXTRA RINGS, 1/8, 1/9, and 2/ per Gross. SEND FOR SAMPLE AND COMPARE!

ORDERS TO BE SENT TO

BARNETT & FOSTER,

"NIAGARA WORKS," 26^T EAGLE WHARF ROAD, LONDON, N.

Mineral Water Engineers, Manufacturing Chemists, and General Providers to the Aerated Water, Wine, Beer, and Cider Trades,

Introduced 1855.]

ROBINSON'S CONCENTRATED WATERS.

[Introduced 1855.]

One Ounce of these Waters added to Forty Ounces of Distilled Water forms a clear Medicated Water (without filtering), similar in every respect to those prepared according to the directions of the British Pharmacopœia, and free from all Chemical impurity. They will keep good any length of time in any climate.



Aqua Anethi, Coucent., 4/ lb.	Aqua Cinnam. Ver. Coucent., 6/ lb.	Aqua Fœniculi, Coucent., 4/ lb.	Aqua Pimentæ, Coucent., 4/ lb.
" Anisi " 4/ "	" Cassiæ " 4/ "	" Menth. Pip. " 4/ "	" Rosæ " 8/6 "
" Camphoræ " 4/ "	" Flor. Aurant. " 8/6 "	" Ang. " 8/ "	" Rosæ Virgin. " 10/6 "
" Carui " 4/ "	" Flor. Sambuol. " 8/6 "	" Virid. " 4/ "	

The above are put up in Bottles of 1 lb. or 1 lb. and upwards, each of which has the Inventor's Protection Label over Cork. From the LANCET, July 15, 1882:—"CONCENTRATED WATERS (Robinson's, Pendleton, Manchester).—Among the samples sent to us we find Aq. Anethi, Anisi, Cinnam. Ver., Rosæ, and some dozen of others. Diluted with forty parts of water they form the ordinary waters of the Pharmacopœia. They are excellent in quality, and will be very useful, especially in country practice.

Wholesale Agents: HEARON & CO., London, and most Provincial Wholesale Druggists. PREPARED BY THE INVENTOR. B. ROBINSON, MANUFACTURING CHEMIST, DISTILLER, AND BREWER OF BRITISH WINES, MANCHESTER

146 MINORIES, LONDON E.C.

New York
Sydney

SODA WATER MACHINERY

AND ALL ACCESSORIES FOR THE TRADE

BRATBY & HINCHLIFFE

HEAD OFFICE
SANDFORD ST. ANCOATS, MANCHESTER.

BOXES BOTTLES, MACHINERY, ESSENCES

Catalogues, Circulars, Testimonials Post Free

TO AERATED WATER MANUFACTURERS

WATSON'S

SOLUBLE ESSENCES

REGISTERED

ARE GUARANTEED TO BE THE FINEST IN THE MARKET

Honourable Mention: International Food Exhibition, Agricultural Hall, London, Oct., 1880. Gold Medal: Soc. of Arts, Paris, 1883.

HAY'S SOLUBLE ESSENCE OF JAMAICA GINGER,
A Pure Essence of the Finest Ginger.
Trade Price 5/- per lb.; 12 lbs. and upwards, 4/6.

HAY'S FORTIFIED ESSENCE OF JAMAICA GINGER,
For First Quality Ginger Ale.
Trade Price 5/6 per lb.; 12 lbs. and upwards, 5/-.

HAY'S GINGER ALE EXTRACT,
For Second Quality Ginger Ale.
Imparts Pungency, Colouring, great Brilliancy, and an unusually Fine Ginger Flavour and Aroma.
Trade Price 4/6 per lb.; 12 lbs. and upwards 4/-.

HAY'S GINGER ALE ESSENCE,
For Third Quality Ginger Ale.
This Essence makes a beverage that is unsurpassed by the so-called finest Belfast Ginger Ale.
Trade Price 9/- per lb.; 12 lbs. and upwards 8/6.

THESE ESSENCES
Have obtained the Highest Testimonials from all the Medical Journals, and from the Principal Trade Journals in this and other countries.



For ORANGE, VANILLA, and all other Essences,
SEND FOR PRICE LIST.

HAY'S HOP ALE ESSENCE,
For the manufacture of the Finest Aerated Hop Ale. This Essence is made from the choicest Hops grown, and is unrivalled for its peculiarly fine Hop Flavour and Aroma. Hop Ale made from this Essence has the full flavour of the finest Hops, and is a really appetising Bitter Beer.
Trade Price 6/6 per lb.; 12 lbs. and upwards 6/-.

HAY'S SOLUBLE ESSENCE OF MESSINA LEMONS.
No. 1. Highly Concentrated.
Trade Price 6/6 per lb.; 12 lbs. and upwards 8/-.

HAY'S SOLUBLE ESSENCE OF MESSINA LEMONS.
No. 2. Makes an exquisitely fine Lemonade.
Trade Price 6/6 per lb.; 12 lbs. and upwards, 6/-.

HAY'S LEMON FLAVOUR.
Imparts to Lemonade all the Fine Aroma and Flavour of the choicest Lemons.
Trade Price 5/- per lb.; 12 lbs. and upwards 4/6.

MANUFACTURING CHEMIST

BEVERLEY ROAD

PROTECTED BY REGISTRATION.

BARRIE'S RESTORAL FRUIT WATERS

This pure sparkling aperient beverage is designed as an elegant substitute for the crude method at present obtaining of mixing dusty salts in a glass, and in such objectionable condition drinking them off.

A fine fruity flavour, derived direct from the fruit, predominates. While, therefore, these waters are successful in allaying the evil effects of indiscretions in eating and drinking, of quenching inordinate thirst, of cooling and exhilarating the body, they are also so pleasant to the taste that a child will sip them.

Constipation, heartburn, biliousness, sick head-ache, and other kindred affections yield to these waters.

They are sold in split bottles at 1s per doz. net, free on rail or steamer. Bottles and cases charged, and only allowed for on return.

SOLE MANUFACTURERS—

G. & P. BARRIE, ALBERT ST., DUNDEE.

DAHL'S DYSPEPSIA CAKE

For Indigestion and Constipation, 1s. and 2s. 6d. per box.

DAHL'S POWDERED CAKES,

For Specially Delicate Cases, 2s. 6d. per box.

THE CHILDREN'S BREAD,

Specially for Children, 2s. per box.

DAHL'S AGENCY 41 EASTCHEAP, E.C

SPONGE IMPORTERS.

M. PETERSON & CO.

(ESTABLISHED 1870),

75 ST. ANNE STREET, LIVERPOOL.

FOR HOME, FOREIGN, & COLONIAL MARKETS.

A WONDERFUL SUCCESS!!

NON-INTOXICATING BEER

Made from MASON'S Original

EXTRACT of HERBS

(REGISTERED.)

Composed of Yarrow, Dandelion, Comfrey, & Horehound.

ENLARGEMENT OF SIZE.

A Sixpenny Bottle makes EIGHT GALLONS of

HERB OR BOTANIC BEER

A NON-INTOXICATING BEVERAGE

Full of Body and Flavour, with a Creamy Head like Bottled Ale, the most perfect substitute for Alcoholic Drinks ever discovered, for either Summer or Winter.

BEWARE of mean and fraudulent imitations.

BEWARE of others copying our title.

MASON'S is the original and only genuine.

MASON'S is a Special Compound entirely from Herbs.

NO OTHER EXTRACT MAKES BEER LIKE IT.

Sold in Bottles at 6d., 1/-, & 2/- each, with directions.

MASON'S WINE ESSENCES

Make Temperance Wines in a few minutes.

Ginger, Orange, Lemon, Raspberry, Black Currant, &c.

These are having a very large sale now, and are extensively advertised.

Sold in Bottles at 6d., 1s., and 2s. each.

Quotations on application.

SOLE INVENTORS & MANUFACTURERS:

NEWBALL & MASON,
Manufacturing Chemists and Botanic Druggists, NOTTINGHAM.

IMPORTANT TO ADVERTISERS.

"THE CHEMIST & DRUGGIST," Vol. 34.

SPECIAL.

"THE CHEMIST AND DRUGGIST" of January 26, 1889, will afford an exceptionally good opportunity for advertisers addressing the Drug Trade at Home and Abroad. On this occasion we can insert

SPECIALLY PRINTED CIRCULARS.

Our charge for the insertion and distribution of these compares most favourably with the cost of addressing, postage, &c., from advertisers' own offices.

This will be the only opportunity of addressing the Trade in this manner in the course of Vol. 34, as the next half-yearly issue in which insets may be distributed is more particularly intended for Autumn and Winter trade.

The Publisher will be glad to furnish full information regarding the circulation of this issue, terms for insertion of circulars, and rates for ordinary advertisements.

Early application is necessary in order to secure good positions.

42 CANNON STREET, LONDON, E.C.

FLATNESS OF TASTE

SO COMMON IN FILTERED WATER,

OBVIATED

BY USING

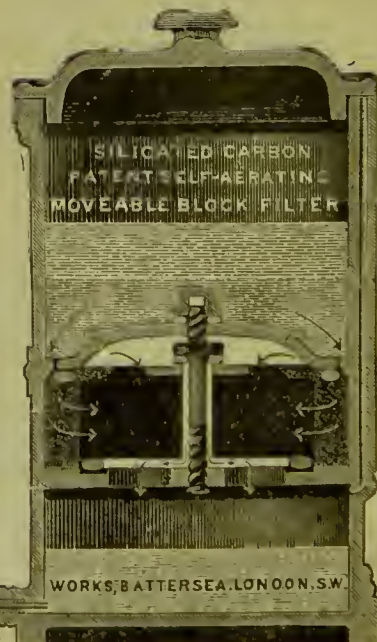
SILICATED CARBON FILTERS AERATED

By means of which the water is Aerated and Filtered simultaneously, rendering it, even after boiling, Pure, Bright, and Palatable.

The Silicated Carbon Block can be Instantly Removed, leaving the whole of the Filter Open for Inspection and Cleansing.



Glass Table Filters.



Domestic Filters.

LIBERAL DISCOUNT TO THE TRADE.

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FOR PRICES AND FULL PARTICULARS, WRITE TO THE
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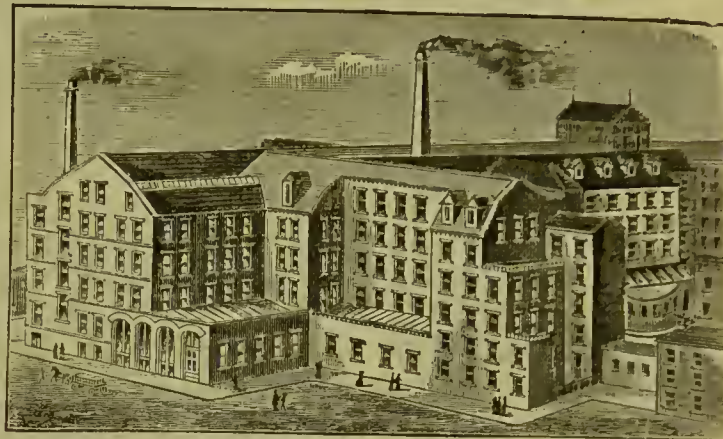
GOODALL, BACKHOUSE & CO.'S

PREMISES AT LEEDS,

CONTAINING A FLOOR AREA OF EIGHT ACRES.



Warehouse and Offices, White Horse Street—West view.



Warehouse and Offices, White Horse Street—South and East View.



Manufactory, Sovereign Street. Frontage 1,048 feet.



GOODALL'S HOUSEHOLD SPECIALITIES.

YORKSHIRE RELISH,

MOST DELICIOUS SAUCE IN THE WORLD.
In Bottles, 6d., 1s., and 2s. each.

GOODALL'S BAKING POWDER,

THE BEST IN THE WORLD.
1d. Packets; 6d., 1s., 2s., and 5s. Tins.

GOODALL'S EGG POWDER,

ONE 6d. TIN IS EQUAL TO 25 EGGS.
In 1d. Packets; 6d., 1s., 2s., and 5s. Tins.

GOODALL'S CUSTARD POWDER,

DELICIOUS CUSTARDS WITHOUT EGGS.
In Boxes, 2d., 6d., and 1s. each.

GOODALL'S QUININE WINE, B.P.

BEST TONIC YET INTRODUCED.
Bottles, 6d., 1s., and 2s. each.

GOODALL'S GINGER-BEER POWDER,

MAKES THE BEST GINGER BEER.
Packets, 3d. and 6d. each.

GOODALL'S BRUNSWICK BLACK,

FOR PAINTING STOVES, GRATES, IRON, TIN, &c.
6d. and 1s. Bottles.

GOODALL'S LAVENDER WATER,

A RICH AND LASTING PERFUME.
In Bottles, 1s., 2s., 5s., and 10s. 6d. each.

GOODALL'S PLATE POWDER,

FOR POLISHING AND CLEANING ALL METALS.
Boxes, 6d., 1s., and 2s. each.

GOODALL'S CALF'S FOOT JELLY,

PURE, STRENGTHENING, AND PALATABLE.
In Bottles, 6d., 1s., and 2s. each.

GOODALL'S BLANCMANGE POWDER,

DELICIOUS BLANCMANGE IN A FEW MINUTES. In Boxes, 6d. and 1s. each.

Proprietors—GOODALL, BACKHOUSE & CO., LEEDS.

PATENT MEDICINES AND GROCERS' SUNDRIES.

Monthly Price List of Patent Medicines, Grocers' Sundries, &c., will be sent post-free on application to
GOODALL, BACKHOUSE & CO., LEEDS.

"The Pills of McKESSON & ROBBINS are quite of the highest class of merit, in respect to the method, in respect to the materials, and in respect to results."—*British Medical Journal*, October, 1881.

A TASTELESS TONIC LAXATIVE GRANULE.

EXACT
SIZE



McK. & R.
PILLS.

Sample Bottles containing 25 Pills, 7s. per doz.; Bottles containing 100 Pills, 24s. per doz.

Formula, Aloin, Strychnine, and Belladonna.—McK. & R. PILLS.

Aloin, 1-5 gr. | Strychnina, 1-60 gr. | Ext. Belladonnæ, 1-8 gr.

DOSE.—One pill three times a day. Morning, noon, and night. Where a painless peristaltic action is desired by the aged or female patient, one pill may be taken every night or second night at bedtime, as directed by medical attendant.

BITTER AND NAUSEOUS DRUGS IN PALATABLE GRANULES.

Calcium Sulphide .. 1 gr.	Ergotin, equal .. 3s. Ext. 3 gr.	Morphine, Muriate 1 gr.	Quinine, Bi-Sulphate .. 1 gr.	Rhubarb Comp. B.P. .. 5 gr.
" " .. 1 gr.	Eucalymin .. 2 gr.	" " .. 1 gr.	" " .. 1 gr.	Salicylic Acid .. 2 gr.
" " .. 1 gr.	Iodoform .. 1 gr.	Opium, Powdered 1 gr.	" " .. 1 gr.	" " .. 1 gr.
" " .. 1 gr.	and Iron .. 1 gr.	Podophyllin .. 1 gr.	" " .. 1 gr.	Strychnine " .. 1 gr.
Cannabis Indica Ext. 1 gr.	Ipecac. Powdered 1 gr.	" " .. 1 gr.	" " .. 1 gr.	Zinc. Phosphide .. 1 gr.
" " .. 1 gr.	Mercury Bin-Iodide .. 1 gr.	" " .. 1 gr.	" " .. 1 gr.	" " .. 1 gr.
Cascara Sagrada Ext. 3 gr.	" Proto-Iodide .. 1 gr.	" Comp. .. 1 gr.	" " .. 1 gr.	" Valerianate .. 1 gr.

In this form the ingredients are not only perfectly preserved, but do not affect the teeth, or offend the palate, and, further, can be conveniently kept out of sight by those who object to be regarded as invalids. Complete list mailed free on application.

PLEASE SPECIFY McK. and R. PILLS.

Originated, 1870, by McKESSON & ROBBINS, New York, U.S.A.

London Agency—Messrs. S. MAW, SON & THOMPSON, 7 to 12 ALDERSGATE STREET, E.C.

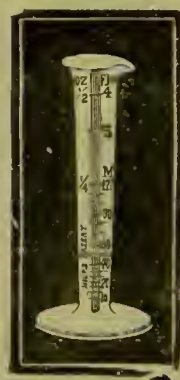
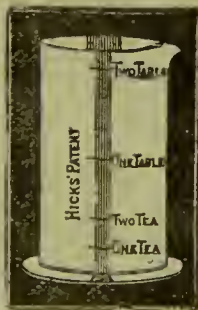
Merchants, Shippers, and the Wholesale Houses in the Trade are also supplied by

Messrs. BURROUGHS, WELLCOME & CO., Snow Hill Buildings, London, E.C.; and Messrs. HOCKIN, WILSON & CO.,
Hospital and Private Formulas] 38 Duke Street, Manchester Square, London, W. [capsuled at Special Quotations.



AWARDED
GOLD MEDAL.

ENORMOUS SUCCESS!



I. I. EXHIBITION,
LONDON, 1885.

WONDERFUL SALE
ALL OVER
THE WORLD.



NEW PATENT OPAQUE GLASS MEASURES

For Domestic, Chemists', and Photographers' Use.

The advantage of these Measures over those of Plain Glass consists in their being made of Pure White Enamel Tubing, with the divisions and figures fired on in indelible black. They can therefore be read with the greatest ease in any light.

SOLE MANUFACTURER:—

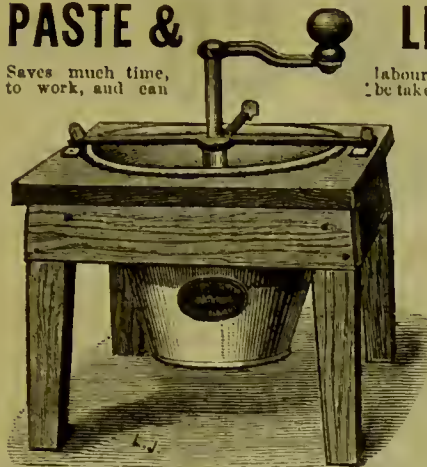
J. J. HICKS, 8, 9, and 10, HATTON GARDEN, **LONDON**



To be obtained of all Wholesale Houses and Chemists. Price Lists on application.

The Bracher-Patent "DESIDERATUM" PASTE & LIQUID MIXER

Saves much time,
to work, and can



labour, and trouble. It is strong, easy
to be taken apart to empty and clean in a
few seconds, and, as it is firmly
fixed to the stand without
screws, is not liable to get out
of order.

For descriptive Price Lists and
Testimonials apply to

BRACHER & CO.

Inventors and Patentees,
Westhill, Wincanton.

SHOWROOMS—
London—100 Hound-stitch.
Manchester—21, Corporation St.
Wolverhampton—2 Cleveland St.

SHOPS COMFORTABLY WARMED

AND

GOODS KEPT DRY

At a Nominal Cost for Fuel and Attention!

See NOTICE re JANUARY 26th, 1889,
on page 14.

TYRER'S SAUCES

GOOD
VALUE

"BOROUGH" KETCHUP

THE GIANT 1d. BOTTLE OF SAUCE.

LARGEST IN THE TRADE.

In Half-Gross Boxes, at 6/6 per Gross.

"BOROUGH" KETCHUP, WORCESTER, HARVEY, YORKSHIRE
OR READING SAUCE.

1d. Sample Bottles, dozen parcels	per gross 5/	extra quality 6/
1d. Giant Bottles, dozen parcels	5/6	6/
1d. Giant Bottles, dozen parcels	6/	8/
1d. Giant Bottles, dozen parcels	6/6	8/
1/2-Bottles (flat or round), reputed 1/2-pint	18/	24/
1/2-Bottles (flat or round), reputed pint	26/	32/
1-pint Imperial Round Stoppered Bottles	30/	36/
1-pint Imperial	50/	60/
12 1/2-gallon Casks (casks free)	each 20/	32/

ROYAL CAFÉ SAUCE.

In 8-oz. square-stoppered bottles, 48/ per gross.
A rich, fruity Sauce of fine flavour, and worth especial atten-
tion, as being the most saleable in the market.

Samples of any kind Sent Free of all Cost by

PETER TYRER,
The "Borough" Ketchup and Sauce Maker,
70 LONG LANE, BOROUGH, LONDON, S.E.

SCOTCH AGENCY: 113 WEST NILE STREET, GLASGOW.
Also Sold by W. & C. PANTIN, Upper Thames Street, LONDON, E.C.
BURGOYNE & CO., 16 Coleman Street, London, E.C.
JOS. TRAVERS & SONS, 119 Cannon Street, London, E.C.



EDWARDS' SOUPS.

DESICCATED and WHITE (Vegetable)

HIGHEST AWARDS:
International Health Exhibition,
London, 1884.

International Exhibition, Liverpool, 1886.

The Manufacturers beg to direct the attention of the Trade to the above articles, now commanding a ready
and remunerative sale. They are put up in a neat and attractive form, in

One Pound, Half-pound, and Quarter-pound Tins.

The DESICCATED SOUP—extract of Beef and Vegetables—is also put up in

One Ounce Packets.

These are packed in cases of 36 one pound, 48 half-pound, and 72 quarter-pound Tins; the penny packets in
gross and half-gross boxes, in cases of 12 gross. Carriage, tins, and cases free. A liberal supply of show-cards,
glaciers, and printed matter, consisting of circulars, Medical testimonials, Press opinions, and counter bills with
name and address.

These preparations have now come largely into use, in preference to flour, as a thickening, and at the same
time a flavouring, for Hashes, Stews, and Soups requiring a body, also as a GRAVY.

SAMPLE, WITH TERMS, FREE ON RECEIPT OF BUSINESS CARD.

FREDK. KING & CO., Ltd.,

Sole Manufacturers, Contractors to Her Majesty's Government,
20 WARING STREET, BELFAST; and 3 to 6 CAMOMILE
STREET, LONDON, E.C.

ROBERT GIBSON & SONS, MANUFACTURERS OF HIGH-CLASS LOZENGES OF EVERY DESCRIPTION, JUJUBES, BOILED SUGARS, COMPRESSED PELLETS, &c., &c.

Shipped through London Houses to all parts of the World. Price Lists sent on application to the Works,
ERSKINE STREET, HULME MANCHESTER ENGLAND.
LONDON DEPOT—1 AUSTRALIAN AVENUE.

"RAMORNIE." LIEBIG'S Extract of Meat.

As supplied to the War Office.

1-lb. Jars.....per lb.	6/2	per doz.	74/0	2-oz. Jars.....per lb.	7/0	per doz.	10/6
1-lb. Jars....."	6/4	"	88/0	1-oz. Jars....."	7/8	"	5/9
6-oz. Jars....."	6/7	"	18/9	1/2-oz. Jars....."	8/0	"	3/0

Write for Detailed Price List to the Australian Meat Co., 9 and 11 Fenchurch Avenue, E.C.

6 lbs. Carriage Free.

MAY, ROBERTS & CO.

9 CLERKENWELL ROAD, LONDON, E.C.

TELEGRAPHIC ADDRESS—"FEEDING BOTTLES LONDON."

CARRIAGE ON SUNDRIES.—We allow 5 per cent. discount on orders for £2 worth of "SUNDRIES" in lieu of Carriage. By this arrangement our Friends are enabled to have enclosures sent with our goods, which they were unable to when we paid Carriage.

NO TRAVELLERS EMPLOYED — BUYERS ARE THEREFORE SPARED THEIR EXPENSES.
COMPARE OUR PRICES.

REDUCED PRICES FOR FEEDING BOTTLES.



"Sandringham." Earthenware Tops.

Sandringham (1s.) — WHITE,
Earthenware Tops—
With White Fittings, each in *s. d.*
box, two brushes..per doz. 5 6
With Black Fittings, each in
box, two brushes..per doz. 6 0
Spare White Fittings " 2 9
Spare Black Fittings " 3 3
Spare Bottles " 1 4



"Sandringham." Screw Glass Stoppers.

Sandringham (1s.) — WHITE,
Screw Glass Stoppers—
With White Fittings, each in *s. d.*
box, two brushes..per doz. 5 6
With Black Fittings, each in
box, two brushes..per doz. 6 0
Spare White Fittings " 2 9
Spare Black Fittings " 3 3
Spare Bottles " 2 0



"Sandringham." Metal Screw Caps.

Sandringham (1s.) — WHITE,
Screw Metal Caps, Nickel plated—
With White Fittings, each in *s. d.*
box, two brushes..per doz. 6 0
With Black Fittings, each in
box, two brushes..per doz. 6 6
Spare White Fittings " 3 6
Spare Black Fittings " 4 0
Spare Bottles " 1 6



"Colonial." Wood Tops.

Colonial (6d.) — GREEN,
Boxwood Tops—
With White Fittings, *s. d.*
1 dozen in box per doz. 2 4
With Black Fittings,
1 dozen in box per doz. 2 7
With White Fittings,
each in box per doz. 2 10
With Black Fittings,
each in box per doz. 3 1
If with White instead of Green
Bottles per doz. 2d. extra.
Spare White Fittings per doz. 1 4
Spare Black Fittings " 1 7
Spare Green Bottles " 0 13
Spare White Bottles " 1 0

Colonial (6d.) — GREEN,
Screw Glass Stoppers—
With White Fittings, *s. d.*
1 dozen in box per doz. 3 0
With Black Fittings,
1 dozen in box per doz. 3 3
With White Fittings,
each in box per doz. 3 6
With Black Fittings,
each in box per doz. 3 9
Spare White Fittings " 1 6
Spare Black Fittings " 1 9
Spare Bottles " 1 9



"Colonial." Screw Glass Stopper.

Colonial (1s.) — WHITE,
Earthenware Tops—
With White Fittings, each in *s. d.*
box, two brushes..per doz. 4 9
With Black Fittings, each in
box, two brushes..per doz. 5 3
Spare White Fittings " 2 3
Spare Black Fittings " 2 9
Spare Bottles " 1 0

Colonial (1s.) — WHITE,
Screw Glass Stoppers—
With White Fittings, each in *s. d.*
box, two brushes..per doz. 4 9
With Black Fittings, each in
box, two brushes..per doz. 5 3
Spare White Fittings " 2 3
Spare Black Fittings " 2 9
Spare Bottles " 1 9



"Popular." Screw Glass Stoppers.

Popular (6d.) — GREEN,
Boxwood Tops—
With White Fittings, *s. d.*
1 dozen in box per doz. 2 4
With Black Fittings,
1 dozen in box per doz. 2 7
With White Fittings,
each in box per doz. 2 10
With Black Fittings,
each in box per doz. 3 1
If with White instead of Green
Bottles per doz. 2d. extra
Spare White Fittings per doz. 1 4
Spare Black Fittings " 1 7
Spare Green Bottles " 0 10
Spare White Bottles " 1 0

Popular (6d.) — GREEN,
Screw Glass Stoppers—
With White Fittings, *s. d.*
1 dozen in box per doz. 3 0
With Black Fittings,
1 dozen in box per doz. 3 3
With White Fittings,
each in box per doz. 3 6
With Black Fittings,
each in box per doz. 3 9
Spare White Fittings " 1 6
Spare Black Fittings " 1 9
Spare Bottles " 1 9



"Popular." Wood Tops.

Popular (1s.) — WHITE,
Earthenware Tops—
With White Fittings, each in *s. d.*
box, two brushes..per doz. 4 6
With Black Fittings, each in
box, two brushes..per doz. 5 0
Spare White Fittings " 2 3
Spare Black Fittings " 2 9
Spare Bottles " 1 0

Popular (1s.) — WHITE,
Screw Glass Stoppers—
With White Fittings, each in *s. d.*
box, two brushes..per doz. 4 9
With Black Fittings, each in
box, two brushes..per doz. 5 3
Spare White Fittings " 2 3
Spare Black Fittings " 2 9
Spare Bottles " 1 9

SPECIAL DISCOUNT FOR FIVE AND TEN GROSS LOTS.

Telephone Number, 1853.

Telegraphic Address CHEMICUS LONDON.

ADVERTISERS' AND BUYERS' REFERENCE LIST AND INDEX TO ADVERTISEMENTS.

ADVERTISEMENTS APPEARING IN THIS ISSUE OF "THE CHEMIST AND DRUGGIST."

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CLASSIFIED LIST OF ALL ADVERTISERS

Those Announcements appear in "THE CHEMIST AND DRUGGIST." Those whose Names do not appear above are published in one of the other issues of this month.

AERTD & MINRELS Apollinaris (Hungarian Aperient Water, Friedrichshall, and Apollinaris) Barnett and Foster Barrie, G. & P. Cutley Abbey Mineral Water Chemists' Aërated Waters Association. Durrant, Geo., and Co. Ellis (Bathin) Hassall and Co. (Oitic Acid Phospho) Hay, W. Idris and Co. Ingram and Rowie Jewsbury and Brown Johannis Co. Mills and Co. (Bourne) Sebach, W., & Co. (Kronenquelle) Taylor, T. and F. J. (See GINGER ALE.)	ANALYSIS Rait, G. L., F.C.S. ACETIC ACID Dunn and Co. Greiff, R. W., and Co. Morris and Callard (Salts) Putz and Hendrichs AGNCIES ABROAD Australan Drug Co. Berkley, Taylor and Co. Bertlo-Smith and Co. Cooking (Japan) Dakin Bros. (China) Fellon, Grimwade and Co. (Melbourne) Fougere (New York) Kempthorne (New Zealand) Lennon, B. G., and Co. Macnaughton, F. J. Peake, Alton and Co. Roberts (Paris, &c.) Rocke, Tompsitt (Melbourne) Sharland & Co. (Auckland, New Zealand) Soul, W. H., and Co. APPARATUS Hracher and Co. (Automatic distilling) Clarke, S. (Food Warmer and Bed Tray) Hughes, W. C. Orme (Scientific) Parke, Son and Rayment Tapp and Co. Rothermel, Paul (Vinegar)	ALMANACKS Davis, J., and Co. Ford, Shapland and Co. Townsend, J. AMMONIA May and Baker. White, A., and Sons BANDAGES Bulley, W. H., and Son Bole Hall Mill Co. Robinson and Sons Schmitze, F., and Co. Seabury and Johnson BATH GLOVES Maw, Son and Thompson Seabury and Johnson BICARB. SODA Gaskell, Deneon and Co. Howards and Sons May and Baker BISMUTH. PREP. Henron, Squire and Francis Howlett and Sons Howards and Sons May and Baker Synnes and Co. White, Alfred, and Sons BLOOD MIXTURE Lincoln and Midland Counties Drug Co.	BOTANIC BEER Newball and Mason BOTTLES Alre and Calder Bottle Co. (LIM.) Barnett and Foster Barrett, R. H. Hennett and Co. Brentby and Hinchliffe Brett's (LIM.) Hearn, E. A., and Co. Innes and Co. Kilnor Bros. Lang, J., and Co. Maw, Son and Thompson Poths, H., and Co. Sanders, H. O., and Son Toogood BOXES Austin and Co. (Cardboard) Irvin and Sollers Metz, Paul (Willow) Noakes, B., and Co. Self-Opening Tin Box Co. BRUSHES Dukas and Co. Sutton, O., and Co. (Tooth) BUTTER COLR, &c. Hush, W., and Son (Marl-goldine) Oldfield, Pattinson and Co. Tomlinson and Hayward	BOOKS Bayley, C. (Dictionary) Davis, J. Hargreaves, Dr. James, Dr. Prosser Lollette, Professor Minter, Dr. Wells, O. Whitla, W., M.D. CAMPHOR Howards and Sons Keene and Ashwell (Homoeo-pathic) Maw and Baker Maw, Son and Thompson CARMINE Rush, W. J., and Co. Sellers, J. CSCRA SAGRADA Duncan, Flockhart and Co. Evans, Sons and Co. Moss, J., and Co. Squire and Sons CAPSULES Denonah, J. (Medicinal) Duncan, Flockhart and Co. Evans, Sons and Co. Hooper, H., and Co. Maw, Son and Thompson Robertson, J., and Co. DITTO (METLLIC) Bettis and Co. Mellin, C. (Mach'ne) Sanders, H. G., and Son
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CATALOGUE

Maw, S., Son and Thompson
(Price Current)
May, Roberts and Co.
Newbery, F., and Sons
Sanger and Son

CEMENT

Foulkes, W. J.
Kay Bros., Lim.

CHALK PRECIP.

Dunn and Co.
Lovermore, Aug., and Co.
White, A., and Sons.

CHEMICALS

Benett and Jenner
Bramwell and Son
Bush, W., Son and Co.
Dunn and Co.
Fletcher Fletcher and Stevenson
Gaskell, Deacon and Co. (Bicarbonate of Soda)
Goodall, Backhouse and Co.
Greiff and Co.
Hill, A. S., and Son
Howards and Son (Pharm.)
Kuhn, B.
Lovermore, Aug., and Co.
Lofthouse and Saltmer
May and Baker
Morris and Callard
Moore and Co.
Oscar Andreane and Co.
Pronk, Davis and Co.
Stern, G. and G. (Pumline)
Smith, T. and H., and Co.
White, A., and Sons
Zimmermann, A. and M.

CHEST PROTECTRS

Hockin, Wilson and Co.
Lalritz Pine Wool
Lynch and Co.
Maw, Son and Thompson
Pattison, G.
Sanger and Sons
Schulze, F., and Co.
Seipert Bros.
Thompson, Millard and Co.
Wood, V.

CHL. OF POTASH

Burroughs, Wellcome and Co.
Hooper, B., and Co.

CHLORIDE OF LIME

Government Sanitary Co.
National Chemical Co.
New Carbolic Sanitary Co., Lim.

CHLORIDE OF GOLD

Oscar Andreane and Co.
Rowland, L.

CHLORODYNE

Davenport (Brownie's)
Freeman, R.
Thomas, Wakeham and Co.
(Dr. Henry's)
Towie, A. F., and Son

CHLOROFORM, &c.

Duncan, Flockhart and Co.
Macfarlan, J. F., and Son
Smith, T. and H., and Co.
Wright, Layman and Umney
Zimmermann, A., and Son

CITRIC ACID

Hessalls (Phospho)
Naeelo, Aveline and Co.

COCAINE-HYDRO.

Howards and Sons

COCA WINE

Armbrrecht, Nelson and Co.
Evans, Sons and Co.

COCOA & CHOCOLTE

Cadbury
Fry
Rowntree and Co.
Scheibler Bros. and Co.
Van Houten's Cocoa

COD-LIVER OIL

Allen and Hanburys
Brooke and Howitt
Burroughs, Wellcome and Co.
Evans, Sons and Co.
Hill, A. S., and Son
Lofthouse and Saltmer
Lofoden Cod Liver Oil Co.
Patersons Chemical Co.
Smith, T. J.
Woolley, Sons and Co.
Wright, Layman and Umney

COFFEE

Pearse and Wheatley
Symington and Co. (Coffee Essence)

COLSIBLE TUBES

Betts and Co.
Sanders, H. G., & Son

COMPRESSED

Allen and Hanburys
Burroughs, Wellcome and Co.
Hooper, B., and Co.
Wyleys and Co.

CONFECTIONERY

Gibson, R., and Sons
Kerfoot, T.
Warrick Brothers

CONCENTRATED**LIQUORS**

(Evans, Sons and Co.
Fletcher, Fletcher & Stevenson
Kellb, B. and Co.

CORN CURES

Mason, W. B.
Maw, Son and Thompson
Rohhison, B.
Seabury & Johnson (Plasters)
Thompson, M. F.

COTTON WOOL

Haynes, G., & Co. (Absorbent)
Maw, Son and Thompson
Rohhison and Sons (Absorbent)
Sanger, J., and Sons
Seabury and Johnson

DENTIFRICES

Jewsbury and Brown
Maw, Son and Thompson, S.
Newbery and Sons
Sutton, O., and Co.
Thompson and Copper
Woode, W. (Arecia Nut)

DISINFECTANTS

Government Sanitary Co.
Hamilton and Co.
Horuby, A.
National Chemical Co.
New Carbolic Sanitary Co.
Saulitis Co.

DISINTEGRATORS

Carter, J. H.
Hardy Patent Pick Co., Lim.

DOG MEDICINES

Spratte (Patent)

DRUGGISTS' SUN.

Ayrton and Saunders
Evans, Lescher and Webb
Evans, Sons, and Co. (Savars)
Hill, A. S., and Son
Idris and Co.
Kay Bros., Lim.
Lynch and Co.
May, Roberts and Co.
Maw, Son & Thompson, S.
Newbery, F., and Sons
Sanger and Sons
Schulze and Co.
Tappan and Co. (Water Softener)
Thompson, Millard and Co.
Toogood, W.
Wood, Vincent

DRUMS, CANS, &c.

Noakes and Co.

DYES

Pronk, Davis and Co.

EAU DE COLOGNE

Farina, J. M.
Shirley, A. W.
Woolf and Son

ELECTRIC APPAR.

Darton, F., and Co.
Gent and Co.
Orme and Co.

EMBROCATION

Clark, W.
Elliman, Sons and Co.
Oil of Olive Co.

ENEMAS

Bailey, W. H., and Son
Higginson and Son
Maw, Son and Thompson
Sanger and Son
Schulze, F., and Co.

ENGRAVERS

Barker, W., and Son
Harris, A. J. (Glass)

ESSENTIAL OILS

Bueh, W., Son and Co.
Bueh, W. J. (Lemone, &c.)
Cooking (Japan Peppermint)
Cunmoock, J.
Evans, Sons and Co.
Jackson, J., and Co.
May and Baker
Naeelo, Aveline and Co.
Stallman and Fulton
Stevenson and Howell
Symes and Co.
Treat, R. C.
Warrick Brothers
Wright, Layman and Umney

ETHER

Duncan, Flockhart and Co.
(Chloric)
Howards and Son
May and Baker
Rohhison

White, A., and Sons
Wright, Layman and Umney

ESSENCES, FRUIT**AND SOLUBLE**

Brathay and Hinchcliffe
Burgoyne, Burdidge and Co.
Bush, W. J., and Co.
Bush, W., Son and Co.
Cunmoock, J.
Goodall, Backhouse and Co.
Hay, W.
Idris and Co.
May and Baker
Oldfield, Pattinson and Co.
Raines and Co.
Stevenson and Howell
Tyrer, P. (Anechovles)
Woolley, Sons and Co.

EXTRACTS, FLUID

Allen and Hanburys
Barber, G., and Co.
Burgoyne, Burdidges
Evans, Sons and Co.
Fletcher, Fletcher & Stevenson
Hearon, Squire and Francis
Hooper, B., & Co.
Moss and Co.
Oldfield, Pattinson and Co.

EUCALINUM

Roche, Tompitt and Co.
(Antiseptic) Pontice and Vinegar

EUCALYPTUS OIL

Downie B. I. P. Co.

EXTRACT, MEAT

Australian Meat Co.
Brand and Co.
Johnston's Fluid Beef
Liebig Co.
Liebig's Wine Co.

FEEDING BOTTLS

Breffits, E. and Co., Lim.
Hearn, E. A., and Co.
Hockin, Wilson and Co.
Kilner Bros.
Maw, Son and Thompson
May, Roberts and Co.
Thompson, Millard
Toogood, W.

FLY PAPERS

Ford, Shapland and Co.
Wilson, S.

FILTERING

Doulton and Co.
Slack and Brownlow
Sliated Carbon Filter Co.

FOOD (Infants' & Invalids')

Allen and Hanburys
Benger's Pancreatized Brand and Co.
Dahl's Dyspepsia Cakes
Goodall, Backhouse and Co.
Hearon, Squire (Malted)
Johnstone's Fluid Beef
Klug, F., and Co. (Edwards' Desiccated Soup)
Liebig Co.
Mellins
Mottershead & Co. (Benger's Food)
Nestle, H.
Ridge's, Dr., Food
Van Abbott (Diabetic)

FORMULE

Brooks, T.

GINGER ALE

Hay, W. (Essence)
Mills, R. M.

GLYCERINE

Fink
Maw, Son and Thompson
Price's Candle Co.

GRANULAR PREP.

Burroughs, Wellcome and Co.
Bush, W., Son and Co.
Cartis and Co.
Evans, Sons and Co.
Hearon, Squire and Francis
Hill, A. S., and Son
Kerfoot, T.
Wright, Layman and Umney

GUMS

Fink (Arabic, &c.)
Levermore Aug., and Co.
Prouk, Davis and Co.

GUTTAPERCHA

Duncan, Flockhart

HAIR PREP.

Brodie, J. (Imperial Hair Dye)
Chesbrough Mufg. Co.

HERB BEER EXTS.

Newball and Mason
Oldfield, Pattinson and Co.
Potter and Clarke

HERBALISTS

Butler, McCulloch and Co.
Newball and Mason (Extract of Herbs)
Potter and Clarke (Extract of Herbs)
Wilkinson, A., and Sons (Compressed Hops)

HOMOEOPATHIC

Keene and Ashwell
Leath and Rose
Thompson and Copper
Watts, J. J., and Co.

HOPS

Wilkinson, A., and Sons (Compressed)

HOP ALE ESSENCE

Hay, W.

HOSPITALS

Londoa Homoeopathic

HYPOPHOSPHITES

Duncan, Flockhart and Co.
Dunn and Co.
Fellows
Fletcher, Fletcher & Stevenson
Raines, Clark and Co.
Symes and Co.
Swann, H. H. (Dr. Churchill's)
Yeatman, F. J.

INHALERS

Anderson and Adams
Evans Sons and Co.
Godfrey and Cooke
Maw, Son and Thompson
Spridon, Tho. Co. (Dr. Churchill's)
Toogood, W.

INSECTICIDES

Sanford
Steiner and Co.
Vogt, G.

INK [See MARKING]

Bowley and Draper
Duncan, Flockhart

KETCHUP

Tyrer, P.

LARD

Bwen, J.

LEECHES

Fitch and Nottingham

Poller and Clarke

LIME JUICE

Evans, Sons and Co.

Idrie and Co.

LINSEED

Idrie and Co.

Mumford, G. S.

LINT

Liverpool Lint Co.
Maw, Son and Thompson

Newsome, C.

Rohinson and Sons

Seabury and Johnson

LOZENGES

Allen and Hanburys
Evans, Sons and Co.
Gibson, R., and Sons (Maufrs.)
Hill and Son
Kerfoot, T.
Randall and Son
Soden Mineral Pastilles
Warrick Broe.

LOOFABS

Maw, Son and Thompson
May, Roberts and Co.

MACHINERY

Burroughs, Wellcome and Co.
Carter, J. H.
Hardy Patent Pick Co., Lim.
Hofroyd & Co. (Limited)
Mein, C. (Capsuling)
Werner and Pfleiderer

MAGIC LANTRNS

Hughes, W. C.
Perken, Son and Rayment

MAGNESIA

Baauer, E. R. (Oxide)
Buel, Son and Co.
Bluneford
Henry, T. and W. (Chained)
Hill and Sons, A. S.
Kerfoot, T. (Oxide)
Murray, Sir James, and Son
Oscar Andreane and Co.

MALT EXTRACT, &c.

Burroughs, Wellcome and Co.
(Kopler's)
Hearon, Squire and Francis
MARKING INKS
Barber, G., and Co. (Crimson)
Christian, J.
Hickisson, J.

MEASURES

Hicks, J. J.

MEDICINE CHSTS

Day, Son and Hewitt (Veterinary)
Day and Sons (Veterinary)

MENTHOL

At Menthol Depot, A. W.
Shirley, Proprietor
Castle Menthol Co.
Christy, F., and Co.
Cooking and Co.
Hockin, Wilson and Co.
Maw, Son and Thompson
Shirley, A. W.

MERCURIALS

Bueh, W., and Co.
Howards and Sons
May and Baker

METHYLATED**SPIRITS**

Burroughs, J. W., and Co.
Harvey, J. W., and Co.
Jance and Co.
Phillips, G., and Co.

METHYLENE

Rohhison, J., and Co.

MICROSCOPES

Darton, F., and Co.
Hughes, W. C.
Perken, Son and Rayment

MILK

Nestle, H. (Condensed)
Swiss Milk Co. (Powder)

MIXING**MACHINERY**

Bracher and Co.
Carter, J. H.
Werner and Pfleiderer

MORPHIA

Macfarlan, J. F., and Co.
Smith, T. and H.

MUSTARD

Banner, E. R. (Oil)
Fitch, Rickman and Co.
Johnson, J. H. and S. (Ess. Oil)

NEPENTHE

Ferris and Co.

OILS, PAINTS, &c.

Gregory, W. (Devonshire Oils)
Pronk, Davis and Co.
Vogel, The Charles A.

OINTMENT BASES

Albert and Co.
Chesbrough (Vaseline)
Green, S. (Singleton's Eye)
Grindley (Petroleum Jelly)

OPTICIANS

Darton, F., and Co.
Perken, Son and Rayment
Raphael, J., and Co.

PAPAIN FINKLER

Kuhn, B.

PARALDEHYDE

Zimmermann, A. and M.

PATENT AGENTS

Horn and Son

PATENT MEDCNS

Albert and Co.
Armbrrecht, Nelson and Co.
(Coca Wine)

Atkinson and Barber (Infant Precure)

Bailey, C.

Beecham (Pills)

Cronch, F. B. (Wafers)

Dahl's Dyspepsia Cakes

Edwards and Soa

Evans, Lescher and Wehh

Fenning's (Powders)

Holloway (Pills and Oint.)

Hop Bitters Co., (Lim.)

Kay Bros., Lim.

Kemp, W. H. (Whoopoline)

Lalor (Phosphodyne, &c.)

Lincoln (Clarke's Mix.)

Mason, W. B.

May, Roberts and Co.

(Hooper's Pills)

Morton, H. (Powders)

Newbery and Sons.

Oil of Olive Co.

Powell, T. (Balsam of Aniseed)

Roberts and Co. (Foreign)

Singleton's Eye Ointment

Soden Mineral Produce Co.

Swift's Specific

Vogel, The Charles A. Co.

Zelo's Skin Cure

PEPPERMINT OIL

Banner, E. R.
Cooking and Co.
Jackson, J., and Co.

PEPSINE, &c.

Burroughs, Wellcome and Co.
Claridge and Co.
Fletcher, Fletcher & Stevenson
Newbery (Linzlin)
Warner and Co. (Linzlin)
Zimuermann

PERFUMERY,**FANCY SOAPS**

Bates, F. W.
Brecknell, Turner and Sons
Chesbrough Munfetring Co.
Chiswick Soap Co.
Coward and Co.
Crown Perfumery Co.
Dunant, Geo.
Ewen (Soaps)
Farman, J. M.
Foulkes, W. J. (Nureery Powder)
Greenhill, T. S., and Son

PILLS (Coated, &c.)

Allen and Hanburys
Beecham, Thomas
Blair's Gout Pills
Brandreth's Sugar Coated
Evans, Sons and Co.
Heaton, Squire and Francis
Hill, A. S., and Sons
Hooper, Dr.
Holloways
McKesson and Robbins
Newbery and Sons
Sanger, J., and Sons
Smith, W. F.
Swann, H. H.
Warner, W. R. (Coated)
Wyleys and Co.

PILL MACHINES

Bracher and Co.
Maw, Son and Thompson
McFerran, J. A.
Robertson, J., & Co. (Coating)
Toogood, W. (Coater)

PINE PRODUCTS

Burroughs, Wellcome and Co.
Stern, G. and G.

PODOPHYLLIN, &c.

Kelth, B., and Co.
Smith, T. and H.

PORCELAINGOODS

Potts, H., and Co.
Toogood, F. C. (Pots, regist.)

POLISHING

Baumgartner (La Brillantine)
Bradley, Bourdas (Albatum)
Clark, W.
Oakey, John, and Sons

PRINTING

Bowers Bros.
Davis & Co. (Limited)
Facsimile Apparatus Co.
Ford, Shapland and Co.
Silverlock, H.
Townsend, J. (Exeter)

PUMILINE

Stern, G. and G.

QUININE SALTS

Howards and Sons
Kuhn, B.
Oscar Andrae and Co.
Zimmermann and Co.

RECIPES**RENNET**

Benger's (Essence of)
Duncan, Flockhart and Co.
Oldfield, Pattinson and Co.

SACCHARIN

Allen and Hanburys
Burroughs, Wellcome and Co.

SALOL

Kuhn, B.

SALICIN

Macfarlan and Co.
Smith, T. and H., and Co.

SAUCES, PICKLES

Goodall, Backhouse and Co.
Tyrer, P.

SCHOOLS OF**PHARMACY,
HOSPITALS, &c.**

Central School of Chemistry
and Pharmacy
City School of Chemistry and
Pharmacy
Liverpool School
London Homoeopathic and
Medical School
Manchester College
South London School of
Pharmacy, Ltd.
The School of Pharmacy
Westminster College

SEALING WAX

Fisher, Clark and Co.
Waterson, G., and Sons

SELTZOGENES

Fevre, T.
Idris and Co.
May, Roberts and Co.

SHAVING

Hovenden and Sons
Lloyd's, Mrs., Euxesis

SHEEP DIP

Grindley and Co.
Tomlinson and Hayward

SHOP FITTERS

Bowling and Govier
Bygrave, J. and W.
Corsan, J. R.
Harris, A. J.
Howlett, S.

Natali, E. (Show Cases)
Yates, W. S.

SOAP

Chiswick Soap Co.
Maw, S., Son and Thompson
Pears' Soap
Stern, G. and G. (Pumiline
Toilet and Sanitary)

SPECTACLES

Botwright and Grey
Darton, F., and Co.
Raphael and Co.

SPIRIT

Boord and Son
Burrough (Pure and Methyl.)
Harvey, J. W., and Co.
Jones and Mason (Methyl.)
Macnair, J. and D.
Phillips and Co.
Smith, Stephen and Co.

SOZOIODOL

Boehm, F.
Tommsdorf, H.

SPONGE

Cresswell Bros.
Maw, Son and Thompson (Bags)
Peterson, M., and Co.

STAMPS (RUBBER)

Hickinson, J.
Pollard, A. W.
Richford, E. M.

STOPPERS

Austin and Co. (Sprinklers)
Barnett and Foster (Tho
Eclipse)
Sanders, H. G., and Son

STOVES

Clark, S., and Co.

STROPHANTHUS

Burroughs, Wellcome and Co.

SURGICAL

Ayrton and Saunders
Bailey, W. H., and Son
Christy and Co.
Cocking, J. T.
Haywood, J. H.
Ingram and Son
Liverpool Patent Lint Co.
Maw, Son and Thompson
Robinson and Sons
Sohntze, F., and Co.
Thompson, Millard and Co.
Woolley, Sons and Co.
Wood, Vincent

STARCH

Critchley (Gloss)

SUGAR

Gibson, R., and Sons

SULFONAL

Burroughs, Wellcome and Co.
Greiff, R. W., and Co.
May and Baker

SYPHONS

Barnett and Foster
Favarger and Co.
Fevre, T.
Kilner Bros.

SYRINGES

Maw, Son and Thompson, S.
Schutze, F., and Co.

SYRUPS

Churchill, Dr.
Fletcher, Fletcher (Liquors)
Idris and Co.
Swann, H. H.

TARTARIC ACID

Greiff, R. W., and Co.
Oscar Andrae and Co.

TIN CANISTERS

Noakes, B., and Co.

TEA

Cave, Johnson and Co.
French and Langdale
Gt. Tower St. Tea Co.
Heseltine, Wm., and Son
Kearley and Tonge
Pearse and Wheatley
Walker and Dalrymple

THERMOMETERS

Bailey, W. H., and Son.
Darton, F., and Co.
Hague, J. J.
Maw, Son and Thompson
Perken, Son and Hayment
Raphael and Co.

TOILET

Albucar Paper Co. (paper)
Downing, J. S. (paper)
Foulkes, W. J.
French Hygienic Co.
Hygienic Paper Co. (paper)
Mack, H.
Quolch, H. C.
Travado, S., and Co.

TOOTH PASTE

Jowebury and Brown
Maw, Son and Thompson
Sutton, O., and Co. (Black)
Woods, M. (Arecat)

TRADE MARKS

Horn and Son

TRUSSES

Bailey, W. H., and Son
Haywood, J. H.
Lynch and Co.
Maw, Son and Thompson

TYPE-WRITING

Facsimile Apparatus Co.
Hickison (Rubber)
Pollard, A. W.

URETHANE

Howards and Sons

VACCINATION

Renner, Dr. (Vaccine Lymph)
Vaccine Association (Lymph)

VALUERS AND**TRANSF. AGENTS**

Orridge and Co.

VARNISH

Clark, W.

VASELINE

Cheshrough Manufacturing Co.

VERMIN KILLERS

Battle, J. R.
Sanford and Son
Stehner and Co.

VINEGAR

Rothermel (Making)

VETERINARY

Clark, W.
Corner, H. (Devonshire Oils)
Day and Sons
Day, Son and Hewitt
Elliman, Sons and Co.
Gregory, W. (Devonshire Oils)
James, W. H. (Blisters)
Spratts (Dogs)
Sutton, F., and Co.
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Vogeler, The Charles A.
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WHOLESALE**AND EXPORT
DRUGGISTS**

Allen and Hanburys
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Bush, W., Son and Co.
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Goodall, Backhouse and Co.
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Hewlett and Son
Hill, A. S., and Son
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Macfarlan, J. F., and Co.
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Summer, R., and Co.
Symes and Co.
Thompson, Millard and Co.
Thompson and Capper
Willows, Francis, and Butler
Woolley, Jas., Sons and Co.
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WINDOW TABLETS

Corsan, J. R. (Engraved)

WINES AND**SPIRITS**

Boord and Son
Coleman and Co. (Meat and
Malt)
Dalley, F. R. & T. C. (Orange)
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Idris & Co.
Ingram and Royle
Jones and Co.
Pearson's Liebig's Beef Wine
Phillips, G., and Co. (Pure
Spirits of Wine)
Robinson, B. (Orange)
Smith, S., and Co. (S.V.R.)

NEWBERY'S OVAL PEDESTAL PILL VASES

REGISTERED PATTERNS.

PRICES MATERIALLY REDUCED.

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Vases supplied with Pills only.

OFFICE TELEPHONE No. 6714.
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Cable and Telegraphic Day Address:—"RUMATIX LONDON."
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Office of
The Charles A. Vogeler Co.
WILLIAM E. GEDDES:—EUROPEAN MANAGER.
45. Farringdon Road. London.
E.C.

THE CHANGE IN STYLE OF PACKAGE.

OWING to the rapidly-increased demand for ST. JACOBS OIL, we have been compelled to establish a Manufactory for these goods at our Farringdon Road Warehouse, and in order that the one-dozen package may be more suited for display in Chemists' shop windows, we have adopted Corrugated Paper Boxes in place of wooden ones heretofore used. These we have had labelled with a finely executed and original design, with the hope and expectation that our efforts to please the Trade will be appreciated, and that Chemists will, as far as possible, place these boxes, whether full or empty, in conspicuous places.

These, in addition to new and original designs in Show Cards, which we are always prepared to furnish Chemists, carriage paid, we trust will increase the sales of this popular remedy.

The demand for ST. JACOBS OIL will be maintained by the same original and dignified advertising which has characterised the announcements of this house since it was first established.

Photo-micrographs :

THE KEPLER SOLUTION

Compared with Emulsions of Cod Liver Oil.

An Ideal Form of Fat.

Cod Liver Oil rarely agrees when taken plain or on an empty stomach ; in either case it is apt to derange the digestive organs, and even cause vomiting and diarrhoea. The more intimately fat is incor-



PLATE I.—A FAIR EXAMPLE OF THE COD LIVER OIL EMULSIONS OF THE MARKET, MAGNIFIED 400 DIAMETERS.

porated with the food we eat the more likely is it to agree with the stomach. Realising this, manufacturers have resorted to alkalies, etc., to subdivide cod liver oil, and lost sight of the fact that it is a food. The adjuvants were objectionable,



PLATE II.—EMULSION OF OIL AND MILK, MAGNIFIED 400 DIAMETERS, and the mixtures oily, exciting disgust. "In all oil emulsions oil globules can as a rule be discovered without difficulty" (Godwin Clayton).

Plate I. represents an emulsion strong with essential oils and gums. So coarse are the oil globules, that a segment of one of them occupies a goodly part of the field. What wonder that many maintain that it is better to give cod liver oil plain than in emulsion !

Plate II. represents what is claimed to be the most finely divided of all emulsions. Not only does it go "queer," throwing down a precipitate, etc., but the size of the large circles (the small ones are milk) conveys a good idea of how indigestible must be the oil in even the best of emulsions.

The microscopic appearance of the globules in milk (Plate III.) forms a strange contrast with that of the two preceding products mentioned. The fat of milk is of course in a highly assimilable form.

Kepler has recently discovered a process by which cod liver oil can be perfectly dissolved in a

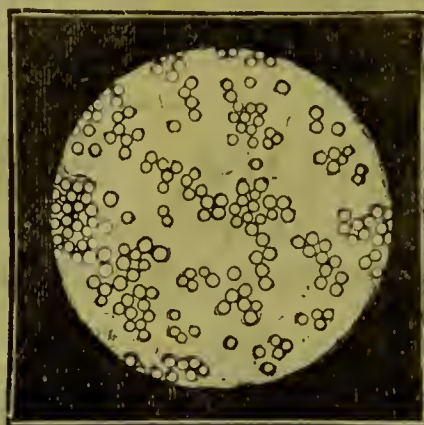


PLATE III.—PURE MILK, MAGNIFIED 400 DIAMETERS, SHOWING OIL GLOBULES.

properly prepared extract of malt. This product is called the *Kepler Solution*. It is more quickly absorbed and assimilated than any other known form of cod liver oil preparations. It is as sweet and palatable as cream. *Kepler Solution* does not dis-



PLATE IV.—Kepler Perfect Solution* of Cod Liver Oil, Magnified 400 Diameters.

turb the stomach like emulsions, and "under the microscope (Plate IV.) no oil globules are visible, and the field is perfectly clear." It is simply a combination of two foods—oil dissolved in malt—and this is why it agrees better than oil and chemicals. It is in no sense an emulsion, for, as Mr. Godwin Clayton says, "its constituents are in a condition of more intimate admixture, namely, that of Solution."

Supplied to the Trade in $\frac{3}{4}$ -lb. and $1\frac{1}{2}$ -lb. bottles at 22s. and 38s. per doz. Retail at 2s. 6d. and 4s.

* "An ideal form for administration of fat."—*British Medical Journal*.

BURROUGHS, WELLCOME & CO., Snow Hill Buildings, LONDON, E.C.

ABOVE PRICES SUBJECT TO USUAL DISCOUNT.

Pepsin (Fairchild).



This is absolutely free from any extraneous substance whatever. One grain of Pepsin (Fairchild) in Scales or Powder will digest 1,000 grains of albumen. By experience and constant experiment we have steadily improved this product, and now present the peptic ferment in a state of marvellous activity.

PEPSIN (FAIRCHILD) is supplied in the form of scales for making solutions and general manufacturing purposes, in powder for dispensing, and Tablets (1 gr.) for easy administration to fastidious patients. The Fairchild Pepsin is rapidly superseding the ordinary pepsins, many of which are utterly worthless. Fairchild's Pepsin is no more expensive than most of the common pepsins, though it possesses many times the strength and activity.



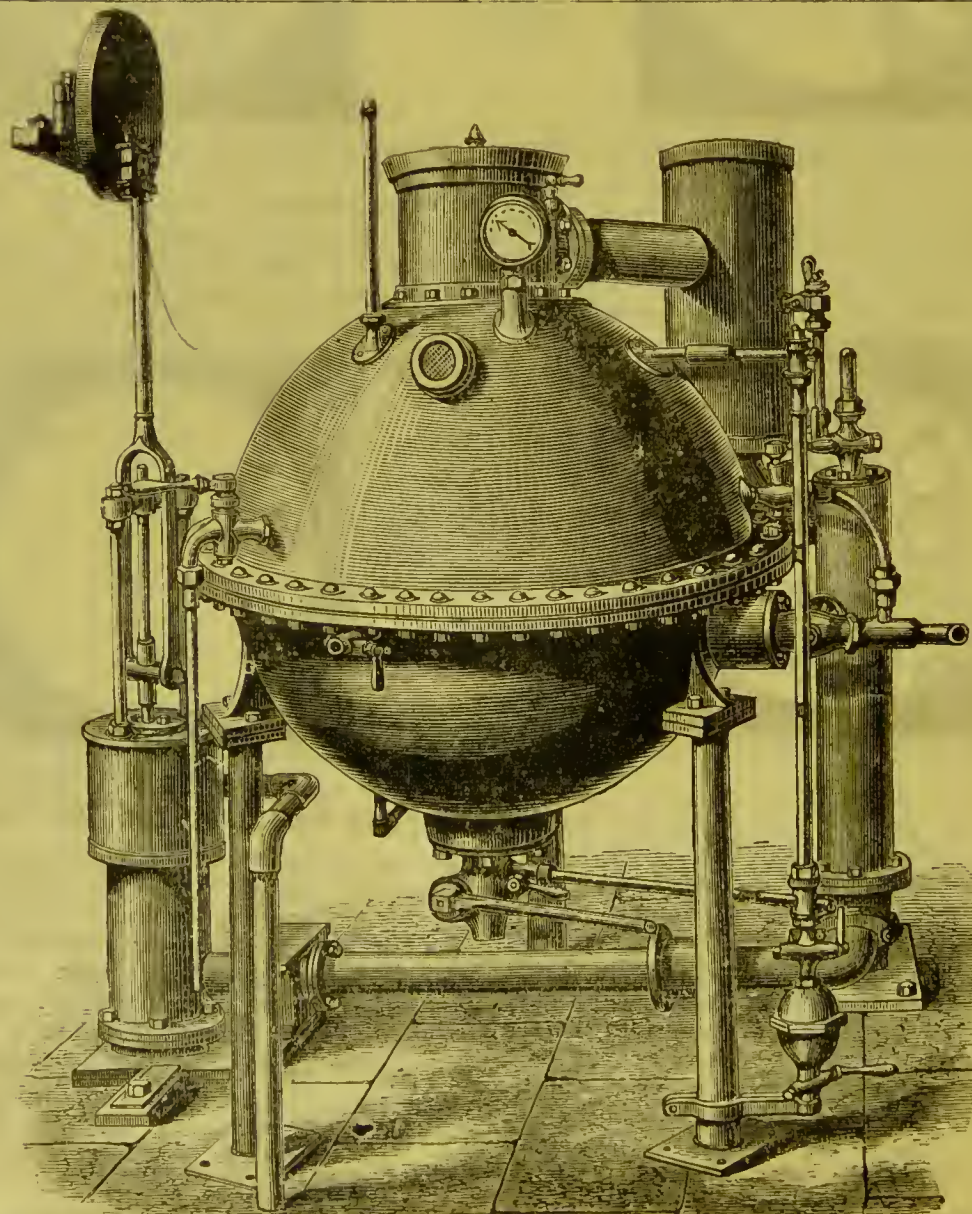
1 oz., retail, 2s. : per doz., 20s.
6s. : 60s.
Fairchild Pepsin in Powder, same price.

1 gr. each, 25 in bottle, retail, 1s. 6d. ; per doz., 11s.
100 " " 1s. 6d. ; " 12s.
Subject to usual Discount.

HEARON, SQUIRE & FRANCIS,

ANALYTICAL AND MANUFACTURING CHEMISTS,
WHOLESALE AND EXPORT DRUGGISTS.

ESTABLISHED AT 95 BISHOPSGATE STREET, 1714.



EVAPORATION OF PHARMACEUTICAL PREPARATIONS CONDUCTED IN VACUO.

5 COLEMAN ST., LONDON.

THE CHEMIST & DRUGGIST

SUPPLEMENT.

Businesses Wanted.
Businesses for Disposal.
Premises to Let.
Auction Sales.

SATURDAY, JANUARY 5, 1889.

Partnerships.
Situations Vacant.
Situations Wanted.
Miscellaneous.

This Supplement will be given free to any Chemist and Druggist or Assistant who will call for it at 42 Cannon Street on Friday afternoon, or will be posted on Fridays to any one who sends an addressed postal wrapper.

ADVERTISEMENTS for this Supplement can be received on FRIDAY MORNING, first post, though it is requested that these may be sent in as early in the week as possible.

EXCHANGE COLUMN ADVERTISEMENTS will appear on page 8 (bottom folio), and must be received not later than THURSDAY AT NOON, to appear in the issue of the Saturday following.

All Advertisements for this Supplement and Exchange Column must be prepaid. Remittances payable to EDWARD HALSE, and crossed MARTIN & CO.

OFFICES: 42 CANNON ST., LONDON, E.C.

CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.

CHEMISTS' TRANSFER AGENTS,

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

The business conducted by Messrs. Orridge & Co has been known as a Transfer Agency since the year 1846, and is well known to all the leading Druggists in the Trade. VENDORS have the advantage of obtaining an opinion on value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding profitable opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

1. £800.—LONDON, W.—Retail and Dispensing, good-class; average returns £800 yearly, *net profits very good*; well-fitted shop, plate-glass front; very good house situated in a very busy thoroughfare; price required £950, including long lease.

2. £600.—LONDON, S.W. (near Victoria Station).—Good-class Dispensing and Retail Business; returns £600 yearly, full prices; handsomely fitted shop and good stock; good house, held on lease at very moderate rental; price £600 cash.

3. £700.—LONDON, N.W.—Dispensing and Retail of good class; established many years; returns average over £700 yearly; large and convenient shop, well fitted, excellent stock; rent £35 on good lease; comfortable house, in good repair; price about £700.

4. £850.—LONDON, S.E.—Dispensing and Retail Business, established many years; average returns £850, *good profitable work*; well-fitted double-fronted shop; comfortable house and good garden; price £800.

5. £700.—LONDON (N.W. Suburb).—Good-class Retail and Dispensing; returns £700 yearly, all easy good-class business; well-fitted shop and comfortable house; rent £50 per annum on lease; very good garden attached to the house; price about £700.

6. £700.—LONDON (Central).—Dispensing and Retail; established 4 years; returns average nearly £700; shop and basement only held, no residence; rent £90, no taxes; price £650.

7. £700.—LANCASHIRE.—Good-class Retail and Dispensing Business, near a large town; present rate of return is over £700 yearly, increasing rapidly; small house, rent low; price £600.

8. £1,000.—WILTS.—In large business centre; Retail and Dispensing and Prescribing Business; returns £1,000 yearly, *very profitable*; well-fitted shop and good stock; rent moderate, on lease; price £650.

9. £1,000.—GLOUCESTERSHIRE.—Very good-class Dispensing Business situated in a first-rate town; returns nearly £1,000 yearly, includes very good proprietary articles, *very profitable*; handsomely-fitted shop and good stock; terms and particulars will be furnished on receipt of business card or London reference.

10. £3,000.—MIDLAND TOWN.—Very old-established Mixed Business, well adapted for partnership; capital corner position; returns about £3,000 yearly; well-fitted shop and commodious warehouse room; *net profit* about £550 yearly; terms, small premium and valuation of stock and fixtures.

11. £1,800.—BUCKS.—Immediate; very old-established well-known Mixed Business, held by the same family nearly 50 years; illness of present owner cause of sale; returns at the rate of nearly £1,800, showing a clear *net profit* of over £500 yearly; good house, &c., attached (vendor's own); new lease will be granted; terms, £250 goodwill, and valuation of stock and fixtures; half purchase-money may be paid by instalments if wished.

12. £2,500.—WORCESTERSHIRE.—Dispensing and Retail; situated in the centre of a very favourite locality; handsome double-fronted shop and good stock; returns £2,500; new lease to be granted; price about £1,550.

N.B.—NO CHARGE TO PURCHASERS.

Other Businesses, Town and Country; particulars free on application. Personal applicants receive Messrs. O. & Co's direct attention and advice, where required, free.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.

Messrs. Orridge & Co. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the special attention of a London agent.

ORRIDGE & CO., 32 Ludgate Hill, LONDON, E.C.

TO LET.

CLAPHAM.—A commodious corner Shop to be Let, with good dwelling-house and side entrance, where there is a good opening for business; rent £60; the landlord, who is a medical man, is willing to let with the tenant who takes it. Richard Price, Estate Agent, 10, Park Road, S.W.

PARTNERSHIP.

PARTNERSHIP, to Wholesale Druggists, sought for by energetic young man, or situation with view to partnership, who has had some experience both in warehouse and counting house, in two London houses; 24 years of age and qualified; London preferred. Apply to G. J. Mott, 10, Brixton, S.W.

BUSINESSES WANTED.

WANTED, a good Dispensing Business, showing a net profit of not less than £300 per annum. State full particulars to A. P. S., care of Mr. T. W. Hannaford, 57 Ludgate Hill.

RETAIL and Dispensing Business, returning from £800 to £1,000, either in London suburb or good provincial town; must bear close investigation, and a fair price will be given. Full particulars to Mr. Harvey, Pharmaceutical Chemist, 14 Junction Road, Amburst Road, Hackney, N.E.

BUSINESS wanted in good Country Town or large village, North or Midlands; if with grocery, &c., no objection; good house essential; management for Trustees or with view to purchase, or Partnership in reliable concern entertained; large experience in prescribing. 163 17, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

PARSON C. BAKER,

8 Stockbridge Terrace, Victoria Station, S.W.,

CHEMISTS' VALUER & TRANSFER AGENT,

Offers his sincere thanks to those Gentlemen who, either as vendors or purchasers, during the year now past, have honoured him with their confidence, and especially those from whom he has received such flattering testimonials. For the coming and future years he desires to assure vendors that the particulars of Businesses entrusted to him for sale will be submitted to *bona fide* purchasers only, and advertisement not be made use of contrary to their desire.

PARSON C. BAKER has now a large list of purchasers desiring businesses of almost every size and kind, and he invites vendors to submit particulars and instructions, which will be adhered to in every respect. When acting for the vendor P. C. B. in no case accepts commission from a purchaser; but he is always prepared, when not so engaged, to advise and act for a purchaser, who, by employing a competent and trustworthy agent to negotiate the purchase (after approval) and complete the transfer, would in almost every case save the cost incurred many times over, and in some cases avoid serious error and loss.

BUSINESSES FOR DISPOSAL.*3s. 6d. for fifty words; 6d. for every 10 words beyond.*

DRUGGISTS, E.C.: £75; stock worth the money; must be sold on account of ill health; busy neighbourhood; no opposition. "Pharmacy," S. H. Smith, Chemist, 227 Commercial Road, E.

In good market town in Norfolk.—Through illness of proprietor, an old-established Family Business; returns £1,000. For particulars apply, Smith & Sons, 44, 46, and 48 Magdalen Street, Norwich.

ECCLES.—For immediate disposal, a small Retail and Prescribing Business, in busy thoroughfare and thickly populated neighbourhood. For particulars address 130 Church Street, Eccles, Lancashire.

A BUSINESS in a new and improving neighbourhood, N. London; established only six months; will be sold for much less than value of stock and fixtures. Address, "Chemist," care of T. W. Hannaford, Esq. 57 Ludgate Hill.

CHESHIRE.—A genuine Retail and Dispensing Business, with wines and spirits, for disposal (no agency); very old established; returns £1,000, with good profits. Address, B. J., care of Clay, Dol & Co., 52 St. Anne Street, Liverpool.

FOR Sale, by Private Treaty, a profitable and old established Dispensing Business, in first-class position in a Midland city; large premises with private entrance; double-fronted shop, well-fitted; satisfactory reasons for leaving; price, inclusive, £900. Address in first instance, "Beta," 83 Church Street, Bilston, Staffs.

UNOPPOSED Good-class Country Business, giving a net profit of £500 yearly; well fitted and heavily stocked; large and convenient house; good garden; low rent; price about £1,000; satisfactory reasons for selling. Address for particulars, "Hants," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C.

UNOPPOSED Retail and Dispensing Business, in a first-class locality 20 miles from London, South-Western main line of rail; returning £500; net profit £200; convenient house, low rental; price £350, or offer; will bear every investigation; can be increased. For particulars, by letter to R. J. H., 5 South Lambeth Road, London, S.W.

BUSINESS for Disposal; £80; Liverpool: unusual opportunity; sickness cause of disposal; good Retail and Prescribing trade; wholesale references, &c.; rent £26; house attached and good big yard; situated in a very thickly-populated neighbourhood, and at the terminus of five ways. Address, W. Chaplin, 164 Westminster Road, Liverpool.

SOUTHPORT (Queen of Watering-Places).—A Light Retail and Prescribing Business; leading thoroughfares; corner shop; well-fitted and stocked; established 15 years; good house; business could be largely increased; rent £70; price for stock, fixtures, &c., to an immediate purchaser £250. P. Scarlett & Sons, Auctioneers, Southport.

DEATH Vacancy.—Established 28 years; Chemist and Dentist and General Mixed Business for disposal in good market town; returns £1,100; valuable Proprietary articles; heavily stocked; commodious house, warehouse, yard, and garden; low rent; price, cash only, £1,000. Apply, Mr. Jos. Chatwood, care of Jos. Brooks, 42 Shudehill, Manchester.

VERY old and well-established Family Retail Dispensing and Agricultural Business, in best part of a large healthy market and residential town in Yorkshire; premises for sale at £1,550, or to let on lease or otherwise; stock, &c., at valuation, which is estimated at about £650; fixtures £190; this is a chance seldom to be met with. Address, "Drugs," care of Frank Fletcher, Leeds.

CHESHIRE.—Good-class Retail and Dispensing Business; same hands 20 years; returning £1,000, full prices; can be much increased; satisfactory reasons for selling; long introduction given; £35 rent; good house; price only £700, or reasonable offer; a genuine reliable concern; strictest investigation allowed; references exchanged. "Cheshire," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

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SITUATIONS OPEN.*3s. 6d. for fifty words; 6d. for every 10 words beyond.*

WANTED, Assistant, principally for small Branch (plenty of time for study). Send full particulars to E. Whaley, Kingston-on-Thames.

WANTED, a Junior Assistant, outdoors, for a Mixed Country business. Apply, Jno. Balcock & Son, Pharmaceutical Chemists and Grocers, Barnard Castle.

WHOLESALE.—Wanted, a competent Fine Chemical Manufacturer as Works Foreman. Address, with all particulars, "Chemist's Foreman," 442 Kingsland Road, E.

JUNIOR Invoice Clerk; must have experience in wholesale trade. Apply, by letter only, stating salary, to Hodgkinson, Prestons & King, 81 Bishopsgate Street Without.

ASSISTANT for Dispensing department, with Minor qualification. Reply, stating full particulars and salary required (outdoors, to J. Stewart, 339 High Street, Cheltenham.

WANTED, an energetic and trustworthy Assistant, outdoors, for retail counter and brisk ready-money trade; abstainer preferred. Apply, D. P. Roberts, 131 North End, Croydon.

WANTED, competent, active, trustworthy Assistant, for a Mixed Country Business (indoors); a permanency for a suitable man. Apply to R. J. Roberts, Chemist, Towyn, N. Wales.

WANTED for West-End business a Junior Assistant; must be a good Dispenser and Counterman, and will be required to keep the books. Apply, M., care of Messrs. Hill & Sons, Southwark Street.

WANTED at once, an Assistant, permanent; must be good salesman and prescriber; salary £55 per annum, indoors, with advances to suitable man. G. S. Boutall, 52 Marchmont Street, Russell Square, W.

TRAVELLER wanted for London and district; one accustomed to the wholesale drug and perfumery, with good connections. Apply, "Chemists," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

TO Parents and Guardians.—Vacancy for a Dental Pupils with a registered American Dentist; special advantages to anyone desiring to learn advanced methods. Address, N., care of Rutterford, 11 Poland Street, London, W.

CLERK wanted; must be quick and accurate, and a Chemist to business; qualification not necessary. Address, "Bannerjee," Central Exchange News Rooms, Newcastle-on-Tyne, stating age and references. A good character indispensable.

An energetic Assistant for a Branch Business; Minor qualification; must have good references from last two situations; no Sunday duty. Apply, with full particulars of age, salary, &c., to E. W. Price, 21 High Street, Dorking.

A WHOLESALE Drug House in the North of England require at once a Junior Clerk; must be a good writer and quick; state age, salary required, &c. Address, "Drugs," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

An Experienced Assistant wanted for a provincial town in Ireland; must be able to take charge and have a knowledge of a mixed business; married or single. Address, X. L., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MANAGER wanted for provincial Chemist's Business; turnover about £3,000; to be paid solely upon the profits; good security and references required. Reply, "Canstle," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C.

WANTED, Manager; qualified; tooth extractor; board and residence offered; state salary required, age, height, reference from last situation, when disengaged, send photo (if possible). Apply to Mrs. Harms, Chemist, Woodhouse, Near Sheffield.

WANTED, a Junior Assistant, outdoors, with a knowledge of book-keeping; must be a good writer and able to assist in the retail when required. Address, in own handwriting, stating age, terms, &c., to Ford, 70 Kennington Park Road, S.E.

WANTED, a good Junior, accustomed to first class trade, energetic and of good address, for the city of Bath, where exceptional opportunities are offered for obtaining a thorough knowledge of the business; unexceptionable references required and given. Apply to "Chemists," 19 Walcot Parade, Bath.

TRAVELLERS wanted who are already representing well-established firms, to open up agencies for the "Spring Blossom Ceylon Tea" (see full page advertisement, p. 11); only one sample required; liberal terms and a preference given to gentlemen working both towns and villages. Cave, Johnson & Co., 8 Linc Street, London, E.C.

QUALIFIED and efficient Senior; applicants will kindly enclose note, which will be returned, and name references, age, height, salary, with any other particulars which will facilitate negotiations and save writing; letters complying with the conditions take precedence, and will be answered by return. Drane, Cardiff.

WANTED, a Married Man, about 30, as Manager; a good house to live in; no must be well recommended; one who has been used to cheap prescribing and tooth-drawing; offers advantages to an energetic persevering man, which will be explained; he must be temperate, and a Christian man preferable. Apply, W. P. H., 148 Southgate Road, N.

WANTED in Drug Stores, where a small grocery trade is also done, a smart, active, pushing Young Man, quick, obliging, and not afraid of work, who would assist at grocery counter when required; a most comfortable home and situation. Address, stating age, height, &c., enclosing carte, which will be returned, 162/39, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

DISPENSER, and to assist Secretary for the Queen Adelaide Dispensary, Pollard's Row, Bethnal Green, E.; registered; married man without encumbrance, whose wife must be capable of cooking for and attending upon the Resident Medical Officer, and to assist in the general work of the Institution; conjoint salary, 30s. per week, with residence, coal and gas. Testimonials (copies only) to be forwarded to the Secretary on or before January 11. Selected candidates will have notice when to attend.

SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

JUNIOR, or for Branch; aged 21; disengaged. J. Chapman, Market Rasen.

AS Assistant, London; aged 30; good experience. "Minor," 5 Wilton Road, Dalston.

AS Assistant; aged 33; height 5 ft. 6½ in. Address, 22 Fountain Street, Bradford.

AS Junior; aged 21; height 5 ft. 8 in.; 4 years' experience. L. M., 59 Blackcroft, Dundee.

AS Assistant; qualified; good references. T., 91 Duke Street, Chorlton Road, Manchester.

EMPLOYMENT wanted, a few hours daily. "Chemist," 1 Charles Street, St. John's Wood.

JUNIOR; aged 19; 5 years' experience; good references. Apply, H. F. Price, Chemist, Arundel.

FEBRUARY.—Junior; outdoors; 23; Wesleyan. Broadley, Post-Office corner, Malton, Yorks.

AS Assistant in good-class Dispensing business; aged 24; qualified. Rutland, Coralgate, Retford.

AS Assistant; experienced; temporary or permanent. "Chemist," 2 A best Street, Merthyr Tydfil.

JUNIOR; Minor qualification; good dispensing experience; disengaged. H. T., 53 St. Peter's Road, Leicester.

OUTDOORS; any capacity; aged 29; sober; experienced. F., 81 Toriano Avenue, Kentish Town.

JUNIOR; aged 22; good salesman; disengaged; highest references. Bloomer, Foxglove Farm, Stourbridge.

JUNIOR; aged 22; height 5 ft. 10 in.; in or outdoors; good references. C. Mrs. James, Rolle Street, Exmouth.

OUTDOOR Assistant or Manager of Branch; prescribe and extract teeth. "Alpha," Baslow, Chesterfield.

AS Improver or Junior; 4½ years' experience; aged 21. W. Sonley, Mrs. Oliver, St. Clement Street, Truro.

WHOLESALE Wet Counter; used to export; excellent references. Address, "Drugs," 17 Larcum Street, S.E.

WHOLESALE.—Wanted, situation in Wholesale house; 8 years in last situation. W., 2 East Mount Road, York.

LOCUM-TENENS; qualified; experienced; good prescriber; tall; testimonials. Hall Roberts, Holbeck House, Folkestone.

AS Improver; 18 months with Surgeon and 12 months with Chemist (retail); aged 20; abstainer. F., Oakengates, Salop.

ASSISTANT (30); home or abroad; 12 years' experience; good mechanical dentist. "Radix," 72 DeLort Road, Bursley.

JUNIOR; 6 years' experience in good-class business; aged 21; disengaged Feb. 14; in or outdoors. H. L., Medical Hall Pharmacy.

JUNIOR; in good Dispensing Business; aged 19; height 5 ft. 7 in.; 3 years' experience. P. Perkins, Pemponpren, Whitland, S. Wales.

JUNIOR; aged 21; 5 years' experience; time for study; small salary 168/7, Office of THE CHEMIST AND DRUGGIST, 42 Cannon St., E.C.

AS Junior Assistant in a Light Retail and Dispensing Business; aged 22; now disengaged; good references. H., 94 Seaside, Eastbourne.

MANAGER or Assistant; 20 years' experience; also in Colour and Seed trade; good references. "Tanx," 77 Branch Street, Burnley.

JUNIOR, for 4 months; passed Medical Prelim.; 3½ years' experience; good reference; aged 19. Haigh, care of Mr. Stephens, Midwiltshire.

ASSISTANT or Dispenser; temporary or permanent; married; aged 30; disengaged. Osborne, 169 St. Leonard St., Bromley, Middlesex.

YOUNG Man, aged 19, height 5 ft. 7 in., Oxford Local and Prelim., desires situation as Junior. R., Rev. Charles Roberts, Loe, Cornwall.

LABORATORY.—Advertiser, well experienced seeks re-engagement in a manufacturing laboratory. L. W., 96 Warwick Street, Belgrave Road, S.W.

ASSISTANT or Dispenser; 6½ years' experience; can prescribe, extract teeth; abstainer; aged 23. H. L. H., 4A Montford Road, Strood, Kent.

ASSISTANT or Manager; unqualified; aged 31; single; permanency preferred; 8 years' reference; late master retiring. Lumbus, Aston, Nantwich.

AS Assistant in good business home; 14 years' good dispensing and general experience; aged 23; disengaged. Smythe, 10 Bridge Street, Worcester.

LONDON.—Engagement for two or three months; indoors; good Dispenser, &c.; small salary; excellent references. J. G., Lakeside, New Castleton, N.B.

WANTED, situation in Wholesale house; 18 years' experience; knowledge of all departments. Address, H. H., 14 St. John Street, Packington Street, N.

SITUATION wanted for two months; aged 26; Minor; good references, nearly two years in last berth. "Chemist," Mrs. Brittan, Wakelin, Alford, Lincs.

AS Assistant, aged 22, 7 years' experience, will give part time (in London) in return for board and residence; disengaged. "Alpha," North Street, Midhurst.

WHOLESALE.—As Assistant in Laboratory or Wet and Dry Counters; aged 23; 8 years' experience; good references. W., 5 Talbot Crescent, Park, Sheffield.

BRANCH Manager or Assistant; Minor and Hall; aged 25; 9 years' experience; good references; married, no family. Jeffery, 15 Clifton Hill, New Cross, London.

BRANCH MANAGER (26); married; good-class experience; Prescribing and Teeth-extracting; good references. "Alpha," care of Sheppard, Bishopsgate Street, Leeds.

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NEW OFFICE AT SYDNEY, N.S.W.—Our Australian staff have found it necessary to take an office at Sydney, N.S.W. This is situated at 13 Queen's Chambers, Barrack Street.

CIRCULARS FOR CHEMISTS. Firms who wish to distribute circulars effectively among chemists and druggists should take careful note of the terms offered for so doing in THE CHEMIST AND DRUGGIST of January 26. It will be found that circulars can be stitched up with this journal and placed to the number of eleven thousand among the best firms in the trade in the United Kingdom and the Colonies at a price very considerably lower than the cost of postage alone. Firms interested please write to us at once, and full particulars will be forwarded.

THE PHARMACEUTICAL COUNCIL did not meet this week—that is to say, the meeting was duly called, but, by arrangement, a quorum was not formed. Notices for the meeting have again been sent out for next Wednesday, and the evening meeting arranged for that date has been postponed.

ACKNOWLEDGMENT. Among the formulae published in the DIARY there are some dozen or more which we are assured by Messrs. F. Stearns & Co., of Detroit, U.S., were copied from one of their catalogues. These, we have ascertained, were included in a collection of recipes which we bought from a person on whom at that time we relied, and who sold them to us at a good price as original. We have not Messrs. Stearns's catalogue before us, but our contributor admits that he did make use of that work in compiling his book. The formulae are none the worse for coming from such a source—indeed, we know of no better guarantee they could have; but we regret that we should thus unintentionally have done a temporary injustice to those eminent pharmaceutical manufacturers.

"THE ART OF DISPENSING."

THE third edition of this work is now ready. Price 3s. 6d., or by post 3s. 10d. May be ordered along with ordinary goods from the principal wholesale houses, who supply it at the published price, 3s. 6d. A list of the firms who hold stock will be found in last week's supplement.

This book may be obtained in Australia from the office of *The Chemist and Druggist of Australasia*, Normanby Chambers, Melbourne, price 5s.

Our agent in New York, Mr. Harry V. Dakers, 45 Liberty Street, will supply "The Art of Dispensing" to American pharmacists at \$1.25 per copy, post free.

"The Art of Dispensing" may be obtained in Canada from Evans, Sons & Co. (Limited), wholesale druggists, &c., Montreal.

"THE HANDY BOOK OF MEDICINE-STAMP DUTY."

THIS work has been written for us by Mr. E. N. Alpe, of the Solicitors' Department, Inland Revenue Office, Somerset House, a gentleman who has wide experience in and intimate knowledge of administration of the Acts which regulate the sale of proprietary medicines. The Handy Book is, consequently, of exceptional value to chemists and druggists, more especially in showing how medicines are made liable to stamp-duty by labelling, circulars, and the like. Reviewers have been unanimous in stating that the work is not only complete, but interesting and invaluable. It is as free as possible from legal phraseology, is readable, and is nicely got up. Price 2s. 6d., or by post 2s. 9d. May be obtained through the wholesale houses in the same way as "The Art of Dispensing."

THE reading cases which we offer to subscribers are now used by a very large number of chemists, and are found very convenient. They keep together thirteen numbers in very tidy form, always ready for reference. By having two cases in hand the numbers of a complete volume are always available until the time comes for binding. We sell these cases at the office for 1s., or by parcels post 1s. 3d., or two for 2s. 3d. We cannot forward them to any house for enclosure, nor by any of the carriers, as in the latter case we have to pay for booking.



Metropolitan Reports.

THE SHOP WINDOW of Mr. Brooks, chemist, of 1 Church Row, Wandsworth, was broken last Saturday by a cart backing into it. The damage done will be covered by 10*l*.

SHARING WITH THE WORKERS.—A correspondent of an evening contemporary, supplementing a list of firms who divide their profits with their employes, states that Messrs. Burroughs, Wellcome & Co., of Snow Hill Buildings, do the same thing every year, and have just made their annual distribution of a share in the profits amounting to from seven to eight per cent. on the wages of the employes.

CARBOLIC ACID POISONING.—Dr. Macdonald, the coroner for North-east Middlesex, held an inquiry last week respecting the death of Jane Norris (43), the widow of a traveller, lately residing at 21 Halton Road, Canonbury. The evidence showed that deceased committed suicide by taking a quantity of carbolic acid while in the lavatory at Hackney Station on December 22. She was in reduced circumstances, and had been very depressed of late. The jury returned a verdict in accordance with the evidence.

THE VETERINARY SURGEONS' ACT.—W. Chiswell, of 123 New Road, Whitechapel, was tried at the Thames Police Court on December 28 for the illegal use of the letters M.R.C.V.S., he not being on the register of veterinary surgeons. A board appeared outside Chiswell's place bearing the words "Chiswell & Co., M.R.C.V.S. Horses attended to." Defendant said he had been in practice in London for the last thirty years, and could undertake anything in connection with a horse with anyone belonging to the College of Veterinary Surgeons. He had a partner, a Mr. Sangster, who was fully qualified. Mr. Lushington said defendant in 1881 might have put himself on the register, but did not choose to do so. His board led the public to believe he was a veterinary surgeon. Such a practice must be stopped. He would be fined 10*l*. and 3*l*. 3*s*. costs.

THE CORONER AND THE CHEMIST.—Mr. Coroner Hicks held an inquiry at Kingston-on-Thames on Tuesday touching the death of a carpenter named William J. Batten (27), who had died in the Surbiton College Hospital on Christmas Day from profuse hemorrhage, due to hydropericardium. It seemed from the evidence that deceased had consulted a chemist, who advised him to go to the hospital. Referring to this, the coroner said it was a peculiar thing that people would go to chemists so much when they were suffering from serious complaints. On the suggestion of the foreman of the jury, Mr. Tamplin, the chemist in question, was called. He said he had viewed the body, but did not recollect a man of deceased's description ever coming to him to be treated for an excessive bleeding of the nose. Witness always recommended people with such complaints to go to a medical man. The coroner said Mr. Tamplin was quite right in doing that, and the jury returned a verdict of "Death from natural causes."

DEADLY POISON IN LOZENGES.—This is the heading that a daily newspaper gives to its report of a coroner's inquest held at Camberwell on Wednesday regarding the death of a child of three, the son of a police constable. The boy had got to a drawer, and eaten about two dozen chlorodyne lozenges, thinking they were sweets. That caused his death. Dr. F. Horton stated that he had examined the half lozenge left, and found that it was composed of morphia, Indian hemp, and prussic acid—three of the most deadly poisons. These lozenges and other patent medicines, he said, were sold in a most reckless manner. The father here said that the lozenges were given him by a friend to cure a cold, and he had no idea that they were poison. A jurymen asked the doctor if he thought that all patent medicines were harmful. The doctor said no doubt patent medicines were very efficacious at times, but if taken in large quantities they were more likely to kill than cure. Some of the jurymen said they quite agreed with what the doctor said, and they thought Parliament should impose some restriction on the sale of such medicines. In this the coroner agreed, and a verdict of "Death from narcotic poisoning" was returned.

AN OLD DRUG HOUSE'S BANKING ACCOUNT.—Mr. Edward Horner, J.P., late of Horner & Sons, writing to the *City Press*

in regard to Messrs. Barclay, Bevan, Tritton & Co., the well-known bankers, says:—"The firm to which I belonged, and retired from in 1884, has banked with Messrs. Barclay for more than 170 years, and is the oldest account they have. I contribute an account of the statement made at the auction of the premises about 1876: 'The business of wholesale druggists at 20 Bucklersbury existed previous to the Fire of London in 1666, after which the premises were rebuilt by Mr. Webster, a member of the firm, who carried on the business.' About 1750 John Horner became a member of the firm, and this connection has since been continued by successive generations of the same family. When the premises were sold about 1876 the *Times* stated, 'Another of the old City landmarks is about to be improved away, 20 Bucklersbury, the premises of Messrs. Horner & Co., wholesale druggists, were let by auction, on a building lease. The premises appear to have been occupied in that trade for generations, if not for centuries. It is thought that probably Shakespeare referred to them when he makes Falstaff talk to Mrs. Ford of people who smelt like Bucklersbury in simple thyme.' As to celebrities of the firm, I beg to remind you that Francis Horner, of whom there is a fine statue in Westminster Abbey, and his brother Leonard, who was at the head of University College, Gower Street, were relations of my family. As for myself, I was born at 20 Bucklersbury, in 1814, and might have been elected, unopposed, Alderman of the ward, a position I declined, being too much occupied in business affairs."

Provincial Reports.

Items of news, and newspapers containing matters of interest to the trade, sent to the Editor, will much oblige.

BIRMINGHAM.

MIDLAND COUNTIES CHEMISTS' ASSOCIATION.—Amongst those present at the supper recently held in connection with this Association was Mr. F. J. Richards, of the Workhouse Infirmary.

MURDER AND SUICIDE.—On December 28 a man named Cobb, a nickel-plater, residing in Moseley Street, having quarrelled with his sick wife, poured some cyanide of potassium into her medicine-bottle just before her morning draught. After seeing her expire in agony he took a dose of the same poison himself, and, in spite of medical assistance, which was promptly forthcoming, died also in less than half an hour. Cobb had the reputation of being a hard drinker, and though he earned good wages he and his wife lived in a state of great squalor and wretchedness.

SUICIDE OF A CHEMIST.—Mr. Hawkes held an inquiry on December 29 concerning the death of Robert Walker (54), chemist and druggist, of 95 Smallbrook Street. From the evidence of Mr. Howard Walker, son of the deceased, it appeared that he had been greatly worried and depressed on account of the falling-off in his business and his inability to meet his payments. He never said anything that would lead his relatives to suspect he would do himself an injury. On Friday he asked for a glass of water, and went upstairs. Directly afterwards a crash was heard, and upon witness and Mrs. Walker running upstairs they found deceased lying on his face in the bedroom. They thought he was in a fit, and attempted to restore him. Then a bottle containing prussic acid was found, and Dr. Barratt was sent for, and arrived almost immediately. He applied restoratives, but death ensued within four or five minutes. A verdict of "Suicide whilst in a state of temporary insanity" was recorded.

CHARGES AGAINST A DRYSALTER.—At the Police Court on December 27, John Johnson (51), drysalter, of Priestley Road, was brought up on remand, charged with obtaining goods by false pretences. On November 27 last a memorandum, which purported to come from "Johnson & Co., fourteen years principal assistant to Alport Bros.; office, 10 Arcade, Snow Hill, Stores, London & North-Western and Midland Stations," was sent to Messrs. Boord & Co., Bar-

tholomew Close, London, containing an order for thirty gallons of methylated finish. The finish was forwarded and invoiced at 3*l.* 15*s.* It is alleged that when he received it at Snow Hill the accused took it to Mr. Bostock, of Sumner Lane, to whom he disposed of it for 3*l.* 5*s.* The defendant, it was stated, falsely represented that he had stores at the London & North-Western and Midland Railway Stations. There was also a charge against defendant of having obtained in a similar manner 2 cwt. of white lead from Mr. W. Duncan, merchant, Southport and London. Prisoner was committed to the Sessions for trial, bail being allowed.

BURSLER.

For some time past there have been two chemists' businesses very near to each other, under the name of Fresson, the proprietors being related, and hitherto very antagonistic. They have now decided to become one, and in the St. John's Square shop window is to be seen a large poster, announcing that "A. R. Fresson, 30 Queen Street, Burslem, begs to inform the public that he has purchased the business formerly carried on by the Hanley Drug Company (Limited), and known to the public as the Hanley Drug Stores, and will be shortly transferred to his premises at 30 Queen Street." The shop is to be let, and the fittings, &c., are for sale.

CHESTER.

ADULTERATED DRUGS.—In the report of Mr. J. Carter Bell, county analyst, submitted to the Cheshire Quarter Sessions at Chester on Monday, it was stated that during the quarter ended December 31, 136 samples had been examined, including 29 samples of drugs. Of the total samples, 15 were adulterated, including 5 samples of cream of tartar, which were adulterated with from 5 to 10 per cent. of sulphate. It is pointed out that the pure cream of tartar is worth more than 100*l.* a ton, while the value of the adulterant is only 10*l.* per ton.

HULL.

A DISHONEST MESSENGER.—At the Police Court last week Herbert Regan, an errand boy, was charged with stealing about 3*l.* from Mr. Thomas W. Robinson, chemist, 9 Myton Place. The evidence showed that Mr. Robinson has the district post-office, and he had from the beginning of the month missed money from the till of the postal department. Suspicion was directed to the prisoner, who had in his possession a considerable sum of money, a watch, &c., when arrested. He was remanded to allow of communication being made with the Government authorities.

MANCHESTER.

PURE YEAST.—Reporting on Wednesday last to the Town Council of Salford on his work as public analyst during the past year, Mr. J. Carter Bell wrote:—"During the past year I have analysed for the Corporation, and also for the rate-payers of Salford, 938 samples. The samples received direct from the public have chiefly been sent by the tradesmen in the borough, who wish to protect themselves from the wholesale dealers, for I may say that the bulk of the adulterations which have been detected have been perpetrated by the wholesale houses. For instance, in the case of German barn it would not be possible for a shopkeeper to deceive his customers by adding starch to his barn. That is done by the manufacturer, who persuades his patrons that the addition of starch is necessary to preserve the article. To show how utterly false such reasoning is, I am informed by a large yeast importer that a person spreading such information can know nothing about the manufacture of yeast, as there is at the present time 100 tons of pure barn sold each week in England, and a large portion of this comes from Hamburg, thus proving that it does not require starch to keep it."

ADVANCE IN THE PRICE OF BOTTLES. A meeting of glass bottle manufacturers was held here on Wednesday, at which they resolved to advance the prices of bottles by 10 per cent. At the meeting at which this was agreed upon the following firms were represented:—Kilner Brothers, Conisborough; Kilner Brothers, Thornhill Lees; E. Brelitt

& Co. (Limited), Castleford; Cannington, Shaw & Co., St. Helens; Dan Rylands (Limited), Barnsley; Bagley & Co., Knottingley; Alloa Glassworks, Scotland; John Kilner & Sons, Wakefield; T. Turner & Co., Dewsbury; Lyon Brothers, St. Helens; John Lumb & Co., Castleford; Alfred Alexander & Co., Hunslet Glassworks; William Brook, Hunslet; George Wood, Hunslet; Redfearn Brothers, Barnsley; J. W. Dobson, Barnsley; Charles Borron & Co.; Nuttall & Co.; Barron & Sons, Mexborough; Waddington & Sons, Mexborough; South Yorkshire Bottle Company, Swinton; Blunn Brothers, Kilnhurst; B. Peacock & Sons, Castleford. Letters sympathising with the object of the meeting were also received and read from the following firms:—Thomas Wood, Portobello, Edinburgh; Powell & Ricketts, Bristol; R. Candlish & Son, Seaham Harbour; Tees Bottle Company, Stockton-on-Tees; Castleford Glass Bottle Company; York Glass Bottle Company (Limited); Burdin, Stables, Wood & Co., Knottingley. Mr. I. Kaberry, of Pontefract, who presided, said that the whole of the manufacturers present were unanimously of opinion that an advance was absolutely necessary, and they all signed the following resolution:—

That each firm of manufacturers send out a circular to their customers that a general advance in the price of all kinds of bottles will take place from the first day of January, 1889, and that this meeting is of opinion that the increase should be at the rate of not less than 10 per cent.

SHEFFIELD.

THE CONTRACT for the supply of drugs and sundries to the Union has been let for the ensuing quarter to Mr. Graham, of Westbar.

CHRISTMAS HOLIDAYS.—Boxing Day was generally observed as a closing day by the pharmacists of this town, but the usual diversity was exhibited in the matter with respect to New Year's Day; one or two of the principal chemists setting a good example by closing, but it was not generally followed.

BUSINESS CHANGES.—The shop in Broomhill Street which was formerly occupied by Mr. Alcock, but has been closed for some time, has been reopened by Mr. England, of Bridgehouse, who has fitted it up in good style. Mr. Harrison, late assistant with Messrs. Cubley & Preston, 4 High Street, will in a few weeks start a business in Abbeydale Road.

IRELAND.

BOTTLES.—Rinnour has it that a large medicine-bottle business is about to be opened in vacant premises in a leading thoroughfare. Several well-known chemists are named as proprietors of the new establishment.

"SEQUAN" STILL SURVIVES.—Chemists here have taken advantage of the recent decision of the Dundee magistrates *re* the words "Prairie Flower" and "Indian Oil," and I have seen a couple of imitations offered for sale.

THE AMERICAN MIRACLE-WORKER.—I learn from a Mullingar friend that the gentleman whose arrival in Ireland I recorded a few weeks ago has been in that town. Great excitement prevailed, and Mr. Larkin performed some wonderful cures.

PHARMACEUTICAL CHARITY.—A subscription list has been opened for the family of Mr. Moorhead, late manager to Messrs. Hoyte & Son, chemists, Sackville Street. Mr. Moorhead died a short time since, leaving a widow and five children almost totally unprovided for.

THE Medical Press "hears" that in consequence of recent prosecutions for the sale of methylated tinctures a remarkable increase has taken place in the prices tendered by some firms for the supply of tinctures to Poor-law Unions, with a corresponding improvement in the virtues of the tinctures supplied.

SOME DANGEROUS PANCAKES were made by a woman in the village of Auburn, a few miles from Athlone. Instead of using bicarbonate of soda a packet of white arsenic was employed, and the result to the whole family seemed at once

time to be extremely grievous, but all have recovered under proper treatment.

FANCIES.—It was at one time considered *infra dig.* for a chemist to "go in for" fancy articles in Dublin. Not so now, as a chemist of my acquaintance tells me that a great part of his Christmas turn-over was for the sale of crackers, bottled fruits, and a fancy sauce of his own introduction. He thinks, and I agree with him, that as the grocers sell our goods let us sell the grocers'.

ADVERTISING.—Several pharmacists are issuing very elegant little *brochures*, under the titles of "My Companion," "The Guide to Health," &c. The idea is new in Dublin, and as the "get-up" of the pamphlets is most artistic and the reading matter really good, most of the advertisements being well-written acrostics, I am sure the little year-books will bring in a golden harvest to their issuers.

SCENE.—Evening party at Fitzjuggins's.

Mrs. F. to Miss Mackey: Niece man, Mr. Maguire, dear; isn't he? He's our chemist.

Miss M.: Oh, indeed. He's very nice; but I'm afraid he is a hypocrite.

Mrs. F.: Why, goodness gracious me, a hypocrite?

Miss M.: Oh! I think he must be one; for when he was drinking that glass of port before leaving he wished you and all the family good health.

BUSINESS CHANGES.—Messrs. Crinion & Co., chemists and druggists, 67 Talbot Street, Dublin, have removed to No. 76 in the same street. Messrs. Allen, apothecaries and chemists, 8 Arran Quay, have opened a branch establishment at 67 Talbot Street, in the premises lately vacated by Messrs. Crinion & Co. Mr. Dawson Tait, for many years connected with Messrs. Hamilton, Long & Co., Sackville Street, has undertaken the management of Johnson & Oldham's old-established Medical Hall in Grafton Street. The manager of Butler's Medical Hall, Mr. Hatton, pharmaceutical chemist, has resigned his post and left Dublin for England. A gentleman from a "swell" London house has been appointed in his stead. Irish chemists will remember that Butler's was one of the largest medical halls in Dublin, and the large staff it at one time supported. Mr. Roche, druggist, 35 Parliament Street, has disposed of his retail business to a Liverpool chemist. Mr. Roche intends to devote himself solely to the wholesale trade, which, it will be remembered, was so successfully carried on by his father, and has taken the premises at 23 and 24 Wellington Quay. Mr. Boland has sold his medical hall at 35 Rathmines Road, and is about to leave Ireland for London.

THE ASSISTANT AND THE MASTER.—On December 21, at the Exchequer Division, Dublin, Mr. Henry Walker, chemist's assistant, sued Dr. Thomas Sparrow, the Meath Medical Hall, Kells, for libel and slander, and claimed 200*l.* as damages. Counsel for the plaintiff stated that his client had been for some time an assistant to Dr. Sparrow, and had been dismissed by him without any just cause or a month's notice or pay. The plaintiff stated that Dr. Sparrow had spoken of him in a libellous and slanderous manner to several persons of his acquaintance, and had refused to give him a testimonial as to his character and abilities. The defence was that Mr. Walker had behaved in an untrustworthy and unsatisfactory manner while in Dr. Sparrow's employment, had on several occasions been incapable of conducting business, and had on one occasion sent out nitric acid instead of hydrochloric acid. The judge recommended an amicable arrangement. He said he would advise the plaintiff to withdraw the case, as he thought he had not sufficient evidence to prove it. Mr. Walker's counsel said his client would not go against the advice of his lordship. The Court then ruled that each party should pay his own costs, and that Mr. Walker should receive a month's pay and a satisfactory reference. The case was then withdrawn.

SCOTLAND.

ABERDEEN.

DR. RICHARD A. S. EDEN has been unanimously appointed medical officer of health for Wilsden, Yorkshire. Dr. Eden served his apprenticeship as a chemist with Mr. G. P. Cruickshank, George Street.

A FLOURISHING NURSERY.—The unprecedented number of twenty-five have entered from this district for the forthcoming Preliminary examination. Surely the reigning president of the Pharmaceutical Society will never venture to say again when speaking of Aberdeen that "as far as he knew it was a long way from anywhere."

THE VACCINATION ACT A DEAD LETTER.—Sheriff Dove Wilson, in a lengthy decision, in a case brought up at the instance of the Old Machar Parochial Board, gives judgment to the effect that the Act does not provide for cumulative fines. Under this decision those in a position to pay a fine of, at most, 20*s.* can ride safely through the Act. The Board, however, on the recommendation of the Board of Supervision, have entered an appeal.

EDINBURGH.

AN OBLIGING MARKET-WIFE.—It is stated that a large commission business in drugs and lotions was conducted during "Sequal's" visit by an estimable and obliging lady, who on ordinary occasions confines her commerce to the less harmful trade of cabbages and onions. Her customers for Prairie Flower, &c. included many of the most fashionable and most learned members of Edinburgh Society—rumour says at least one judge.

It is considered to be significant of future amity and good fellowship that the President (Sir Andrew Clark, Bart., M.D.) and treasurer (Sir Dyce Duckworth, M.D.) of the Royal College of Physicians, London, were present last week at the annual dinner of the Royal College of Physicians, Edinburgh.

"SEQUAL'S" MEDICINES.—Mr. Falconer King, the Edinburgh City Analyst, has been employed by the Edinburgh *Evening Dispatch* to analyse the "Sequal" medicines, and he reports the results of his examination as follows: "Indian Dentifrice"—carbonate of lime and starch; "Sequal's" Oil—possibly whale-oil with some turpentine, and perhaps a small quantity of some essential oil; "Prairie Flower"—aloes, alkaline carbonate (potash or soda), alcohol, and probably extract of capsicum or pepper.

LEWICK.

ANOTHER BOGUS DOCTOR.—At the Lerwick Sheriff Court on December 26, before Sheriff Mackenzie, Hector Mackenzie was charged under the Medical Act with having at Walls, Shetland, falsely represented himself to be a doctor. He pleaded not guilty, but was convicted on the evidence of three witnesses for whom he had prescribed medicine, and was sentenced to pay a fine of 15*l.*, with 5*l.* 3*s.* 6*d.* of expenses. The alternative was twenty-one days' imprisonment.

NORTH OF IRELAND CHEMISTS AND DRUGGISTS' ASSOCIATION.

THE committee of the Association met on Monday evening, December 31, at 7 P.M., in the Central Hall, Rosemary Street, Belfast, Sir James Haselett, president, in the chair. The minutes of the previous meeting were read and confirmed, and a report of the proceedings in Parliament since last meeting was submitted. The annual meeting was arranged to be held on Monday, January 28. A discussion took place as to the best means of getting the young men in the various establishments to join the society, and a recommendation was agreed to be brought up to the general meeting for their consideration.

Draft circulars were passed to be circulated amongst the members and associates, asking a renewal of their subscription, and enclosing a voting paper for the committee of 1889. To be returned before the annual meeting, the circular to contain a list of all members on the register for 1888. This concluded the business.

At 8 P.M. on the same evening a general meeting of the Association was held, a large number of members and associates being present, the President in the chair. The secretary read the minutes of the last meeting, which were passed. Members and associates were elected. Three applications for election were left over for inquiry till next meeting. The President reported as to the work of the committee in

opposing the Pharmacy Act Amendment Bill, and stated that it had been withdrawn before the end of the session. The Bill, he considered, was so loaded with amendments that it could never have received any consideration. But if a new Bill was introduced which would satisfy the parties affected, there might be a hope of its passing, although the temper of the House was such that it would be very difficult to carry any Bill relating to pharmacy.

It was arranged that the annual meeting should be a social one, and that tea should be provided for the members and lady friends. A committee was appointed to carry out the arrangements, Mr. W. Doig to be convenor of same. A recommendation from the committee as to associates was read, and ordered to be printed and circulated amongst the young men in the various establishments, after which the meeting adjourned.

FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

THE ACADEMY OF MEDICINE on December 22 elected Dr. Moutard-Martin vice-president, and Dr. Féréol secretary. Drs. Laboulbène and Professor Planchon, of the College of Pharmacy, were chosen for members of the Council. Dr. Perrin, the vice-president for 1888, becomes the president for 1889.

LYONS WINS THE PRIZE.—As was foreshadowed in *THE CHEMIST AND DRUGGIST* of December 22, Lyons has been selected as the seat of the "Ecole de Santé Militaire" to be established in pursuance to a recent law. Rules for admission will soon be issued for the benefit of candidates. The Val-de-Grâce School of Applied Military Medicine and Pharmacy is to remain as it is, a sort of finishing school before joining actual service.

SACCHARIN IN BELGIUM.—A commission appointed by the Belgian Academy of Medicine have come to the conclusion that saccharin cannot be considered a substitute for sugar in aliments; but that, although differently borne by different subjects, it is not poisonous. They are of opinion also that it is not wholly voided out through the urine, and is liable to find its way into the milk and saliva. Consequently the commission have reported that in their judgment all persons selling wholesale or retail articles sweetened with saccharin should be compelled to indicate the fact in a conspicuous manner.

ACQUITTED OF WIFE MURDER.—A pharmacist at Arzew, Algeria, named De Maximy, last July shot and killed his wife under circumstances which were at the time related in *THE CHEMIST AND DRUGGIST*. The provocations for the deed were that the wife was notoriously unchaste, and finally tried to poison her husband by emptying a vial of aconitine into a bottle of wine placed before him at the breakfast table. The killing was done while in a fit of passion at the discovery of the attempted poisoning, which has been duly proved. Last week at the Oran Court of Assizes M. de Maximy was acquitted by the jury.

EPILOGUE OF THE OXYGEN EXPLOSION.—An explosion, it will probably be remembered, occurred last March at Brin Frères' oxygen works, Rue Gavarni. The casualty, it was explained at the time (see *THE CHEMIST AND DRUGGIST*, April 7, p. 452), was not a chemical but a mechanical accident, caused by over-pressure. As a young man was instantly killed by the explosion, both the engineer, Mr. C. W. James, and the manager, M. Rivet, were prosecuted for involuntary homicide. At the trial last week, before the Correctional Tribunal, the engineer was fined 200f., and the manager acquitted; but in the outgrowing civil suit M. and Mme. Devilliard, the father and mother of deceased, obtained a life income of 600f. each, as damages.

THE HAVRE POISONINGS.—The former assistant of the late Havre pharmacist—who is suspected of having poisoned several inmates of the pharmacy, besides his employer—has been arrested in Paris, in the Ternes quarter. The prisoner is named Pastré-Beaussier, aged 27. From 1886 to 1888 he was employed by pharmacist Decamps, Place de l'Hôtel de Ville, Havre, at a salary of 120f. a month, and during that

time everyone living there, except the prisoner, was in succession taken sick, and three persons died, including the proprietor, whose death caused the sale of the establishment and the dismissal of the assistant. Pastré-Beaussier stoutly denies his guilt, and appears confident that his innocence will clearly be shown.

A SUB-PREFECT POISONED.—M. Janbert, the sub-prefect of Barcelonnette (Basses-Alpes), was, on December 25, fatally poisoned with atropine. On the morning, being unwell, he consulted his brother, Dr. Jaubert, who prescribed 1 gramme of antipyrin. The prescription, hastily written with pencil, was sent, not to a regular pharmacy, but to Dr. Richard's office, where, in the doctor's absence, his sister, who was in charge, having read "atropine, 1 gramme," at first refused to deliver the substance. Finally, however, as the messenger insisted, she yielded and dispensed the poison. Shortly afterwards Dr. Richard came home, and on learning what had been done hastened to the sub-prefect's house, but it was too late. Notwithstanding all antidotes and treatment, the patient died the same night.

PRIZES TO SCIENTISTS.—On December 24 the Academy of Sciences proceeded to confer the many prizes entrusted to its discretion by generous donors, living and dead. The following may be noticed:—The Valz prize (460f.) was awarded to Professor E. C. Pickering, of the Harvard College Observatory (United States), for important improvements in the use and value of photometry, and the astronomical deductions to be drawn therefrom. The Janssen prize (a gold medal) to Mr. Huggins, of London, for his excellent works on celestial spectral analysis, immediately following Kirchhoff's discovery. In chemistry, half of the Jecker prize (500f.) was given to M. Maguene for his researches on vegetable physiology, and especially his study of the formation of sweet principles in plants, and the other half (500f.) of the same prize to M. Cazenave for his investigations on the camphor derivatives. In geology, the Cuvier prize (1,500f.) was awarded to Mr. Joseph Leidy, of the United States, for his investigations on the prehistoric and extinct faunas of the Western territories. In botany, M. V. Fayod, of Genoa, received the Desmazières prize (1,600f.) for his works on agaries, and Professor Gaston Bonnier, of the Paris Faculty of Sciences, the Montagne prize (1,000f.) for his memoir on the synthesis of lichens. Less than 30,000f. were distributed this year.

GERMAN PHARMACEUTICAL NEWS.

(From our Berlin Correspondent.)

PROFESSOR FRESSENIUS has lately celebrated his seventieth birthday. Great festivities were indulged in both by students and by the inhabitants of Wiesbaden, where the professor lives and works. The estimation in which he is held was evidenced by the fact that 300 telegrams and letters were received by him on his birthday from all parts of the world.

ARTIFICIAL COFFEE BEANS are on the market. They consist of the roasted meal of various cereals massed with dextrin or some such substance. Two factories are said to exist in Cologne which offer the machinery and plant with formulae for 1807; the apparatus turns out from 10 cwt. to 12 cwt. of coffee per day at about 17. a cwt. The factitious "berry" can only be recognised with great difficulty; if the artificial coffee is mixed with genuine its detection is believed to be almost impossible.

THIOL.—Ichthyol has a rival in the field under the name of "Thiol." This is a patent preparation made from the paraffin oils obtained in the distillation of peat. According to the specification oil is heated to about 215° C., and a certain quantity of sulphur is added. Sulphuretted hydrocarbons are formed with disengagement of sulphuretted hydrogen. From the former the sulpho-acids are formed by the action of concentrated sulphuric acid, and from the acids the various salts are prepared. Trials have been made with the sodium and ammonium salts in the Clinic, Berlin, by Dr. Reeps; and it is said that in several cases thiol has been found equal to ichthyol therapeutically, and only slightly different from it in chemical and physical properties.

THE RELATIVES' INTEREST in the concession held in an "apotheker" when the proprietor dies soon after being licensed is still under discussion. Two cases were mentioned in my last (December 15, 1888). A third case has recently occurred. A little over two years ago a chemist received a licence; for nearly a year he was engaged in building and fitting an "apotheker." This, of course, entailed the expenditure of a considerable amount of time, labour, and money. He died after the business had been established about a year, and the family are now obliged to hand it over to a stranger, according to the valuation made on the lines already indicated. It is evident that such a proceeding may mean a loss to the relations, and the realisation of this fact may tend to encourage a favourable view of an entire change in the system of licensing.

THE ANNUAL TARIFF of prices and dispensing charges for Prussia just issued includes the names of some new remedies. It will probably be of interest to note the figures at which the pharmacist is to charge for these articles, while at the same time the list indicates the opinions of the compilers as to which of the recent introductions are likely to continue in demand:—

Camphoric acid		1 decgm.	3d.
"	" ..	1 gramme	2½d.
Picronitric acid		10 grms.	2d.
Creolin (liquor antisepticus Jeyes')	10 "	"	1½d.
"	" ..	100 "	8d.
Cumol		10 "	2d.
Guaiaacol		1 grm.	2d.
Phenacetin		1 "	3d.
Sozoiodol (sodium and potassium)	.. 1 "	"	4d.
Sulphoral		1 "	3d.
"		10 grms.	2s. 11d.
Thallin tartrate		1 decgm.	3d.

With regard to manipulations the only novelty is the inclusion of a price for compressing medicines. For one tablet, including all the necessary operations, a charge of 1½d. is allowed. The other changes are of slight importance.

NOTES FROM KEW.

THE issue of the *Kew Bulletin*, November, contains a number of notes which are of considerable interest to pharmacists and druggists. The subjects treated upon in the twenty-eight pages are Lagos Rubber; Liberian Coffee at the Straits Settlements; Tea Oil and Cake; Demerara Pink Root; Food Grains of India (refers to *Coix gigantea* only); Yoruba Indigo (with a plate); Trinidad Ipecacuanha; Treatment of Vines in France (practically the use of Bouillie Bordelaise, already fully described in this journal); Huskless Barley and Ramie.

In the article on Liberian coffee the opinion is expressed that "should the present high price of coffee be maintained it is not unlikely that the cultivation of Liberian coffee will prove sufficiently remunerative to warrant further attention being paid to it." Some correspondence with Messrs. Lewis & Peat is added.

Tea oil and cake formed the subject of a paper communicated four years ago to the North British branch by Mr. Hugh McCallum, then acting as Government analyst at Hong Kong. The oil (a bland yellow fluid) is pressed from the seeds of *Camellia Swankua*, and the residual cake is used largely in China for fish-poisoning, and more generally as a hair wash and as a soap. Mr. McCallum found this cake to contain a large percentage of saponin, and to this it owes its cleansing and poisonous properties. Mr. Charles Ford, F.L.S., superintendent of the Botanical Department at Hong Kong, adds some useful notes regarding the product, chief of which is one relating to the use of a decoction of the cake for killing earth worms.

Demerara Pink Root.—There have been received from St. Vincent, West Indies, specimens of a plant which was represented "to be poisonous to cattle, sheep, and goats, and to prove fatal in two or three hours." This plant was identified by Professor Oliver as *Spigelia anthelmia*, L., a member of the natural order Loganiaceae, commonly distributed throughout the tropical parts of continental America and the West

Indies. It is a glabrous annual, with two pairs of upper leaves so closely approximate that the plant somewhat resembles *Paris quadrifolia*. The flowers are small and tubular, of a white and pink colour, arranged in a unilateral scorpioid raceme. The fruit when ripe is purple. This plant, like the Carolina pink (*S. marilandica*), is of considerable efficacy for the cure of worms and febrile diseases supposed to arise from the presence of worms. In fact, Bentley and Trimen state that "the root and herb generally of *S. anthelmia* is a popular remedy in British Guiana as an anthelmintic. Its effect is said to be even more certain and marked than that of the official pink root (*S. marilandica*)." There can be no doubt, adds the writer of the *Bulletin*, that this plant possesses such drastic properties as may render it exceedingly dangerous as food for cattle and sheep that may be driven to feed upon it. We have no evidence heretofore that animals have been actually killed by eating the leaves, but the fact is by no means an improbable one.

Trinidad Ipecacuanha.—It is well known that the demand for the official ipecacuanha is steadily increasing, while the supply of the drug is either stationary or gradually becoming scarcer. Inquiry is therefore naturally directed to plants that may possess similar properties, in the hope that they may serve to supplement or replace the drug hitherto exclusively in use. As a case in point, we find that the bark of *Syocarpus Rusbyi*, Britton, known in Bolivia as "cocillaña," is in course of being investigated, "because it contains a strongly active principle, somewhat related to emetine as to its physiological action," and in the hope that "the close resemblance of its properties to those of ipecacuanha will qualify it to replace to some extent that drug, which has now become so scarce and high." Another drug possessing similar properties has been received from Mr. J. H. Hart, F.L.S., Superintendent of the Botanic Gardens at Trinidad, consisting of the roots and leaves of *Cephaelis tomentosa*, W. These are used in Trinidad as an emetic, and it was hoped that their physiological action might be due to the same principle as that existing in the true ipecacuanha. The *Bulletin* gives a botanical description of the plant, stating that an old drawing of it, not very good, appears in Aublet *Plantes de la Guiane Françoise*, t. 61. A more recent drawing appeared in the *Botanical Magazine*, t. 6, 696, from a plant grown by Messrs. Veitch at Chelsea. The species is described "as a very singular plant, congeneric with that yielding medicinal ipecacuanha, but of very different appearance, a native of tropical America, where it extends from Mexico through British Honduras, Nicaragua, United States of Colombia, British Guiana, to equatorial Brazil on the east, and to Peru on the west side of the Andes. It is found in Trinidad, but in no other of the West India Islands." As our readers are aware Mr. Francis Ransom, of Hitchin, examined the root chemically and communicated his results to the Pharmaceutical Conference meeting at Bath. A report will be found in our issue of September 8, 1888.

Personalities.

MR. JONATHAN HUTCHINSON, F.R.S., the eminent surgeon was born at Selby, in Yorkshire, 1828. He was admitted a Fellow of the College of Surgeons in 1862, and was Professor of Surgery and Pathology in the College from 1878 to 1883.

SIR WILLIAM GULL, M.D., entered on his seventy-fourth year on New Year's Day. The veteran physician was last Saturday attacked with paralysis, and remained unconscious for several hours, his life being despaired of, but he is now on the way to recovery.

WE notice that *Trade, Finance, and Recreation* has interviewed Mr. Thomas Christy in regard to the recent concession by the Excise authorities in favour of spirituous medicinal preparations. Mr. Christy is of the opinion that "the concessions will have to be further extended before they will be of any very great use."

DR. ROSWELL PARK, of Buffalo, declares that oxide of zinc is a better solid antiseptic than iodoform. Rather hard on the latter.

Foreign and Colonial.

ANOTHER AMERICAN DRUG WAREHOUSE BURNED.—Telegrams announce that the immense warehouse belonging to the Richardson Drug Company at St. Louis, U.S., was destroyed by fire on January 1. The building was of brick, and consisted of six storeys. The loss is estimated at 800,000 dollars.

PROFESSOR C. P. PENGRA, of the United States, having visited this side, writes the inevitable article on "Pharmacy in Europe" in the New York *Pharmaceutical Record*. The funniest thing he says is in regard to the new laboratories of the Pharmaceutical Society. He states, "They have recently built a decided addition to the older building, which, I believe, is to be devoted mainly to chemistry and recitation rooms." We cannot judge what specially distinguishes "a decided addition" from any other sort; but the "recitation rooms" we imagine are what we here call "research laboratories."

OPIMUM-SMUGGLING.—A German firm sent some time ago, through shipping agents at Rotterdam, fourteen cases of Chateau Lafitte claret to Samarang, in Java. On arrival it was found that the cases were filled with opium instead of wine. The tribunal at Samarang has condemned the German agent resident there to a year's imprisonment, and to a fine of 10,000 florins. In case the fine is not paid, he will have a further term of imprisonment at the rate of one month for every 200 florins remaining unpaid. It is expected that this severe punishment will act as a deterrent against similar proceedings.

PROFESSIONAL WOMEN.—M. Charcot, one of the Jury of the Faculty of Medicine in Paris, in complimenting a young lady who had obtained her doctor's degree, said that "women pass their examinations, when they do pass them, even more satisfactorily than men; but what will be always a bar to their success is that they have no real love of their proposed profession. What they aspire to is the first rank, the most prominent posts, the most lucrative offices; and what they dislike is the humble and unpleasant, but necessary, service of humanity such as is given by the hospital dresser." Curious, but precisely the same thing might just as correctly be said of men.

AN 800% PRIZE OFFERED.—A committee of the Caspian Sea (Russia) fishing firms offers a prize of 5,000 roubles (nearly 800% nominal) for the best pamphlet in English, French, German, Russian, or Latin on the subject of the nature of the poison which is formed in raw salted fish. The pamphlet should explain the physical and chemical nature of the poison, its effect (as demonstrated by experiments on animals) on the heart, the circulation of the blood, the digestive organs, and the nervous system, the time required for the absorption of the poison into the digestive organs, the methods by which contaminated fish may be distinguished from sound, the indication of means by which the development of the toxic elements can be arrested, and the indication of the antidotes and medical assistance required in cases of poisoning. Information may be had and answers should be addressed to the "Imperial Ministry of Domains, St. Petersburg."

HARD AND SOFT PALM OIL.—The staples of trade in the Benin river, in Western Africa, are palm oil and palm kernels. From 1872 to 1881 trade was stopped in kernels. The stoppage, says the *O. P. & D. Rep.*, was associated with the death of an old king of Benin, from which the people were led to believe that if they allowed the kernel trade their "big men" would die. The busy season in the trade is from April to July. On the Benin side of the river, that is the right bank, soft oil is the staple; whilst on the left bank, and eastward, hard oil is obtained, the difference of manufacture being that one—the hard oil—is the result of the cold process as regards manufacture, while soft oil is obtained by the boiling process. Palm oil is packed in casks holding from 225 to 240 gallons. Hard oil is not acceptable in the German markets; it has to be sold in England. The soft oil is said to be as good, if not the same, as Lagos oil; yet it rarely commands the same price. Kernels are bought by cask measures of half a ton each, used for the purpose. Hamburg offers no

present sale for Benin hard oil; nor will Benin soft oil, although said to be equal to that of Lagos, fetch as much as the latter.

THEFTS OF DRUGS AT THE PHILADELPHIA CUSTOM HOUSE.—It is stated in the Philadelphia papers that several well-known drug and sponge importers in that city have suffered so many losses recently through alleged thefts from their importations while the goods were in charge of the Customs service that they contemplate passing their goods in future through the New York Custom House. The stolen articles were taken from the original packages imported for the purpose of determining the duty to be charged on them, and they were not returned. On the part of the Customs service it was claimed that samples taken for such a purpose might be held for thirty days, but most of the goods missing have been taken longer ago than thirty days, and have never been returned to the owners. The first house to complain were Messrs. William B. Burk & Co., importers of sponges and chamois skins. The firm had been missing articles, which were invoiced as having come to them, for about two years. The fact of the pilferings was brought forcibly to their notice some weeks ago, by the experience of one of their best customers. They had imported six cases of sponges and sold them to a retail dealer. The cases were sold at \$20 each, and were put out as containing six sponges each. In a few days the firm received a note from the buyer saying that five of the cases were as represented, but that in the remaining case there was only one sponge instead of six. The firm made good the difference. At about the same time a buyer came into the store and asked for a sponge of an uncommon quality; one of the members of the firm said that he would show him something that would be satisfactory, and would take it from a box that had never been opened. He sent across the way to the store house and had a box brought over, bearing the label "Twelve pieces." The box was opened in the presence of the customer, and to his surprise and that of the merchant was found to contain only nine sponges. An examination showed that the box had been opened before and put together again and fastened with American nails. That part of the box which had been untouched was still fastened with foreign nails. The case was one which had gone through the appraiser's office. Mr. Burk sent down to Appraiser Baker's office at once and made a formal complaint to Special Agent Marcus Hanlon. He was told there that the matter would be investigated. Previous losses that the firm had suffered had been borne in silence, as it was thought that a complaint would cause delays and annoyances that would entail a greater loss than the pilferings. As they finally lodged a complaint, however, they included in it all the losses they had endured, making a claim of \$300. They were subsequently informed that an account of the case had been sent to Washington, but they have not heard that there has been any result in that quarter. The Smith & Kline Company of Philadelphia, who had also suffered through similar robberies, had never made any complaint, preferring to bear them rather than to run the risk of making an enemy in the Custom House who could give them annoyance. Special Agent Hanlon, however, after having heard the story of Burk & Co., and deciding on an investigation, called on them, and a letter was sent him setting out the firm's recent losses. The losses were mainly in perfumes and other small articles aggregating something between \$25 and \$50 in value. The articles, as usual, had been taken from the firm's consignments as samples to be used in determining the rate of duty, and had not been returned. One of the members of the firm was told on one occasion by Mr. Hanlon or one of his assistants that their goods also had been traced, and that the officers knew where they were. A little later they received a consignment of English soaps of a well-known make. The soap comes in paper boxes, a dozen cakes to the box. To the surprise of the firm the Customs authorities insisted on opening the boxes and taking out the soap to weigh it. Technically the firm conceded that the action might be right, but as the soap was so well known they were of the opinion that the cakes had been taken from the boxes and weighed simply to annoy them. As the firm could not afford to have the boxes torn open and so much disarranged that the retail dealers would complain of their appearance, they are contemplating having their imports brought in by way of New York.

Gazette.

PARTNERSHIPS DISSOLVED.

Lawford & Pratt, Leighton Buzzard, surgeons.

Middleton, A., & Mason, D., Chiswick, under the style of the Chiswick Soap Company, and St. George Street, St. George-in-the-East, under the style of Middleton Brothers, soft soap manufacturers, white lead and colour manufacturers, oil refiners, and drysalts.

Niemann & Elger, Dunster House, Mincing Lane, City, general colonial brokers.

Ovenbeck & Co., Bradford, drysalts; as far as regards P. Ovenbeck.

THE BANKRUPTCY ACT, 1883.

RECEIVING ORDER.

Wilding, William Arthur, Arthur Road and Tollington Road, Holloway, late of Church Stretton, Shropshire, physician and surgeon.

ADJUDICATION.

Wilding, William Arthur, Arthur Road and Tollington Road, Holloway, late of Church Stretton, Shropshire, physician and surgeon.

NOTICES OF DIVIDENDS.

Hodgson, William Bacon, Manor Park, Essex, physician and surgeon—first and final div. of 5s. 5d., any day except Saturday, Chief Official Receiver's offices, 33 Carey Street, Lincoln's Inn.

Rickarby, Arthur George, Walton-on-the-Naze, chemist and druggist—2s. 6d., first instalment of composition of 5s. in the pound, any day, Official Receiver's office, Colechester.

Warren, Thomas, Princes Risborough, Buckinghamshire, surgeon—first and final div. of 4s. 3d., any day, Official Receiver's office, Oxford.

ORDER ON APPLICATION TO APPROVE SCHEME.

Rickarby, Arthur George, Walton-on-the-Naze, chemist and druggist—composition of 5s., 2s. 6d. within two weeks and 2s. 6d. in six months. Receiving order rescinded and bankruptcy annulled.

ADJUDICATION ANNULLED.

Rickarby, Arthur George, Walton-on-the-Naze, chemist and druggist—ground of annulment, approval of a composition of 5s. in the pound.

SCOTCH BANKRUPT.

SEQUESTRATION.

Macallum, John, Argyle Street, Glasgow, chemist and druggist.—Creditors will meet in the Faculty Hall, St. George's Place, Glasgow, January 11, at 12 o'clock. Baird & Stirling, 133 St. Vincent Street, Glasgow, agents.

BANKRUPTCY REPORT.

Re MARCUS LEON, Union Court, Old Broad Street.

A FIRST meeting of creditors under this failure was held in the London Bankruptcy Court on Tuesday, before Mr. G. W. Chapman, Assistant Official Receiver. The accounts filed by the debtor, who describes himself as a manufacturer of chemical preparations, show gross liabilities of 2,470*l.* 10*s.* 2*d.*, of which 756*l.* 2*s.* is expected to rank against assets valued at 140*l.* 18*s.* 9*d.* In explanation of the present proceedings it is necessary to state that in July, 1887, a receiving order was made against the bankrupt, his unsecured liabilities then amounting to 1,881*l.* 17*s.* 6*d.*, and his estimated assets to 51*l.* 10*s.* 4*d.* Under those proceedings he was adjudged bankrupt, and his discharge was granted by an order dated March 22, 1888, subject to judgment being entered against him for the amount of the provable debts (1,945*l.* 0*s.* 9*d.*), with costs (1*l.* 10*s.*), such judgment to remain in force until payment of a dividend of 2*s.* 6*d.* in the pound on such debts, together with the costs. The bankrupt has, however, not paid the same, and he has now included the liability in respect thereof in his present statement of affairs, the amount appearing as expected to rank representing the 2*s.* 6*d.* in the pound on the debts, with the costs. Mr. Leon now submitted a proposal to pay the preferential claims and costs in full; 2*s.* 6*d.* in the pound on the debts proved in the former bankruptcy and 5*s.* in the pound on the debts since incurred. This offer was not, however, met with approval, and it was then increased from 5*s.* to 7*s.* 6*d.* in the pound on the new debts. This was accepted, but a second meeting must be held to confirm the arrangement.

Obituary.

BOLAS.—On December 31, at 111 Icknield Street, Birmingham, Mr. Arthur Bolas, chemist. Aged 53.

BROUGHTON.—On December 12, Mr. Alfred Broughton, chemist and druggist, Meadow Lane, Leeds. Aged 55.

BROWNS.—On December 14, Mr. Edward Brown, pharmaceutical chemist, The Saltisford, Warwick. Aged 48.

COLEMAN.—On December 21, Mr. William Coleman, chemist and druggist, Worcester Street, Wolverhampton. Aged 67.

HUGHES.—On December 19, Mr. Samuel Hughes, chemist and druggist, High Street, Stourbridge. Aged 81.

KEITH.—On December 15, at New York, U.S.A., Mr. George H. Keith. Aged 48. The deceased gentleman was managing partner of the firm B. Keith & Co., 75 William Street, New York, which is well known to our readers. Mr. Keith had been ill for a few days only before his death.

LOVE.—Canadian pharmacy has recently lost a staunch friend in Mr. Neil C. Love, who died at 76 Gerard Street, Toronto, on November 16, in his seventieth year. Mr. Love, who was a native of Scotland, carried on a drug business in Toronto with considerable success, and, in addition to civic honours, was twice president of the Ontario College of Pharmacy.

MOSCROP.—On January 1, at Bolton, Mr. Alderman Thomas Moscrop, chemist and druggist. Aged 77. Mr. Moscrop was mayor of Bolton last year, and had been on the magisterial bench a year previously. He took a prominent part in the local affairs of Bolton. In politics he was a Conservative, and he was besides a staunch and liberal supporter of the Wesleyan body. To the objects of that society he had contributed about 3,000*l.*, and he also gave 500*l.* to the Infirmary. He served an apprenticeship to the business in the borough of Salford. From there he moved to Liverpool, and afterwards he made his way back to his native town of Bolton, where he built up a flourishing concern as wholesale druggist and drysalter. Some years ago he retired from business and devoted himself exclusively to public work. To the gas company his knowledge of chemistry was of great value, and it is not too much to say that his services in this respect resulted in a saving of many thousands of pounds to the ratepayers.

ROBINSON.—On December 16, at 253 Stratford Road, Birmingham, Mr. Eardley Robinson, chemist and druggist. Aged 76. The deceased for many years kept the chemist's shop in Deritend now occupied by Mr. R. Campion.

SILVERS.—On December 14, Mr. Robert Silvers, chemist and druggist, Gaol Street, Great Yarmouth. Aged 64.

WALKER.—On December 29, at 95 Smallbrook Street, Birmingham, Mr. Robert Walker, chemist and druggist. Aged 54.

WARHURST.—On December 11, at 4 Balliol Road, Bootle, Mr. William Thomas Warhurst, chemist and druggist. Aged 50. The deceased was one of the best-known chemists in Liverpool, he having at the time of his death no less than sixteen open drug shops in the district, which he was in the habit of visiting occasionally, keeping a horse and trap for this purpose. He was a prominent member of the Freemasons, and a large number of these and other friends attended his funeral at Anfield Cemetery.

WILSON.—On December 14, Mr. Joseph Wilson, pharmaceutical chemist, Corn Market, Penrith. Aged 61.

WYCHERLEY.—On December 12, Mr. Richard Clay Wycherley, chemist and druggist, Lancaster Road, Preston. Aged 51.

AN American medical journal gives the following warning: "Look out for the man who is advertising an infallible cure for a corn, price \$1, and money refunded if the corn does not disappear. If you send him a dollar you will receive by return mail the following recipe: 'Cut off your toe.'"

Trade Notes.

MR. CROFTS has sold his business at Argyle Street, Birkenhead, to Mr. C. S. Knapp, of Salisbury. Mr. Parson C. Baker arranged the sale and transfer.

MR. WALKER, of Hornsey, has parted with his business to Mr. Brook, of Louth. Mr. Parson C. Baker was the agent who conducted the sale. Mr. Brook will continue to supply his well-known formulae from this address.

MESSRS. CROSSE & BLACKWELL notify that Mr. Samuel John Blackwell has retired from the firm, and Mr. Edmund Alfred Blackwell, a son of their senior, has been admitted as a partner.

MESSRS. PLOEHN & HOPF, essential oil distillers, of Leipzig, announce that on April 1 next their business will be transferred to Dresden-Radebeul, where they have built a new factory.

MESSRS. T. BAGE BLYTON & CO., of Manchester, have appointed Mr. Arthur W. Shirley, of 30 Paternoster Square, E.C., as their sole agent in London for chemists' confectionery and other manufactures.

MR. W. HAY, manufacturing chemist, Hull, has prepared a delightfully perfumed pocket almanac for this year. There are 30 pages of printed matter in the booklet, including pages of formulae, hygienic notes, and the like.

WE observe that Messrs. Evans, Sons & Co. notify considerable reductions in the price of their porous plasters. We understand that they have greatly improved the make of the plasters, and the manner in which they are put up for sale leaves nothing to be desired.

KEMP & CO. (LIMITED), Bombay, are issuing periodical lists of new remedies. The last one received (November) contains, in addition to notes on the latest remedies, particulars of oval gelatine-coated pills manufactured by the firm.

MR. M. SCHULTZE, formerly with Messrs. Domeier & Co., has established himself under his own name as a drug, gum, and spice dealer. We understand that Mr. Schultze has secured the agencies of some good foreign firms. His office is at 10 Mark Lane, E.C.

WE have received from Messrs. D. P. Maddon & Co., of Surat, India, a calendar for the year 1889, adorned with a well-executed likeness, in colours, of His Highness the Raja of Dharampur. We also note that Messrs. Maddon & Co. are chemists, by special appointment, to the collector Sahib of Surat.

MESSRS. W. KEMP & SON, of Horncastle, have for some years published a "Household and Farm Almanack," with diary and calendar. That for 1889 is quite up to previous editions. It contains a deal of sound advice and useful information, as well as several pages of light reading, including a report of "The Annual Meeting of the No. 17 Medicine Guild," at which Mr. Cough Cordial presided.

WE have received a newly-compiled list from D. G. Cresswell & Co., Barkerend Road, Bradford, quoting for the various applications of their anti-friction engine-packings and of their various asbestos manufactures, including asbestos yarn (fire and acid proof), asbestos chemical cement, cloth, cord, ropes, thread, fibre, and carbon, all made from asbestos, the last named being especially intended as a filtering-medium.

WE have to thank Messrs. Chas. Smith, Son & Gowland, of 11 Jewry Street, E.C., for a copy of their very useful and handsome calendar for 1889. The calendar gives the dates, so far as they are fixed, of all the public sales of colonial and foreign produce to be held this year, and contains an illustration of the display of ostrich feathers shown at the Cutler Street warehouse prior to the last public auctions.

THE Lofoden Cod-liver Oil Company, of 135 Vine Street, Minories, E.C., are placing upon the market the "North Star" brand of steam-refined Norwegian cod-liver oil. The sample submitted to us shows an article of good bright colour and almost free from the peculiar odour which deters

so many people from taking the medicine. Mr. Arthur Claridge, the manager of the company, asks us to state that he shall be glad to forward samples and quotations upon application.

ONLY a month ago we announced that Messrs. W. J. Bush & Co. had opened a factory of their own at Messina. We have now information that they have secured an important interest in the old and respected house of Henri Paye, of Grasse, whose business will henceforth be carried on under the style of W. J. Bush, Paye & Co. In thus establishing themselves in the centres of the producing districts, Messrs. W. J. Bush & Co. will no doubt be in a position to handle the essential oils of France and Italy with corresponding advantage.

MESSRS. SOUTHALL BROS. & BARCLAY, of Birmingham, are just now bringing out an attractive little pamphlet, which they propose to circulate through chemists, entitled, "Norwegian Manners and Customs." The pamphlet contains numerous illustrations of Norwegian life and scenery, with some remarks on these and on the cod-fisheries. With this subject allusions to the A 1 Cod-liver Oil are skilfully interwoven. Chemists wishing to have some of these pamphlets for distribution should refer to Messrs. Southall's advertisement in this week's issue.

It will have been noticed from an announcement in our last week's issue that Scheibler Bros. & Co., 23 New Broad Street, E.C., have been appointed agents for "The Kaiser Cocoa," manufactured by Mr. F. W. Altgelt, of Crefeld, Germany. The peculiarity of this article is that it is a combination of purified cocoa with peptonised meat extract, so that it is of a highly nourishing character. It is pleasantly flavoured, and when made into a beverage in the ordinary way forms a delicious breakfast adjunct. A similar combination is made into small tablets, forming a concentrated and agreeable food for travellers and others. It is stated that these preparations were used by the late Emperor of Germany on the recommendation of Dr. Leyden.

A CHRISTMAS TRAGEDY IN BRIEF.

Written in a (violent) hurry.

LADY ROSAMUND her name was,
She a fair and stylish dame was—
Oh that time allowed reflections
On her manifold perfections!

Lady Rosa had the sweetest
Dog—of canine pets completest—
Oh that we could stay and ponder
On this quadrupedal wonder!

Not giving each minute particular,
"Puck's" symptoms had a form vermicular—
Space forbids my here revealing
All the lady's anxious feeling!

A friend suggested nux areca,
A potent drug—(when ground, 'tis weaker)—
I really cannot stop to mention
About its uses and intention.

Christmas comes; its pudding festive,
Spiced with nutmeg's more digestive.
What a theme for tuneful verses!—
But my narrative most terse is.

By a blunder, cook including
Nux areca in the pudding
Thought it tasted "rather funny"—
Here's a theme!—but time is money.

The pudding's gone! Now come inquiries
Of the cook. Confusion dire is!
I lose a glorious chance, that's certain—
But o'er the scene we'll draw a curtain!

December 26.

E. D.

MR. EDGAR S. WIGG, 38 King William Street, Adelaide, S.A., holds stock of "The Art of Dispensing."

THE MELBOURNE EXHIBITION.

SECOND NOTICE.

CHEMICALS.

W. Burnip & Co., 2nd Brands-Swiete 18, Hamburg, represented by their Melbourne house at Little Collins Street, W., have a good display of heavy chemicals, such as sodium carbonate, Epsom salts, borax in lump and powder, boric acid, dry white lead, chlorate and bichromate of potash, and lead compounds. Aniline colours are another feature of the case, and the Carliol brand of mixed paints and varnishes for staining wood all tints are also shown.

Gaskell, Deacon & Co., Widnes, Lancashire, exhibit bleaching powder, bicarbonate of soda, crystal carbonate, chloride of calcium, soda ash, refined alkali, cream caustic soda, 60 per cent., and white caustic soda, 60 per cent. and 70 per cent. Two specialities of the firm are bleaching powder manufactured by the "Deacon process," and crystal carbonate and bicarbonate of soda, manufactured direct from vat liquor by processes recently patented. In the "Deacon process" for the manufacture of chlorine the gaseous hydrochloric acid is taken direct from the sulphate of soda furnace into an apparatus, where it is treated in contact with air and a salt of copper, chlorine and water being produced. In their improved "alkali process" the impure solution of soda is treated with carbonic acid and air in blowing-vessels, and exposed to an elevated temperature in "coil" furnaces, by which treatment silica, alumina, and the iron of the ferrocyanogen are precipitated. From this purified solution, after filtration, various forms of pure carbonate of soda, such as refined alkali and crystal carbonate, may be obtained, and from the crystal carbonate so derived is made the pure bicarbonate. We have more than once referred to crystal carbonate, a sodium carbonate containing $17\frac{1}{2}$ per cent. of water against 63 per cent. present in ordinary soda crystals; as the firm say, 1 part by weight of crystal carbonate, and $1\frac{1}{2}$ part by weight of water, give a mixture having the same composition as ordinary soda crystals; there is, therefore, a great saving of freight in the former. The latter, too, melts in its water of crystallisation at about 90° Fahr., so that there is a risk of loss in these climates, where the shade temperature frequently exceeds this. Crystal carbonate does not fuse below a red heat; it is in minute crystals, and thus offers a large surface for solvent action, and during solution 35 units of heat are evolved, considerably facilitating the process. Messrs. Mussabini & Co., Melbourne, are the agents.

PHARMACEUTICAL.

C. F. Asche, Hamburg, whose agents are Schutze, Stefens & Co., 37 Little Collins Street East, Melbourne, has almost the only really pharmaceutical exhibit in the German Court, and even here a number of proprietaries make their appearance. The display is a fine one, and the goods shown comprise various fluid extracts and compressed medicines, such as chlorate of potash, rhubarb, &c., &c. In specialities there are juice and pills of Njino, medicinal lozenges, including worm-tablets with directions in Chinese, tamarinds, Swiss pills, and others.

SURGICAL BANDAGES.

Max Arnold, Chemnitz, Saxony, represented in Australasia by G. Arnold & Co., 6 Bridge Street, Sydney, and Clarke Buildings, 61 Bourke Street West, Melbourne, has a really splendid display of surgical dressings. The case is large and well arranged, and contains photographs of the factory where the goods are produced. Besides the purely surgical appliances, there are others of much interest. A packet for fractures, containing all the necessary bandages, is put up in a package made of six oblong pieces of strong wire gauze, which can be used as splints. Esmarch's handkerchiefs are shown here, designed by Professor Esmarch, the great surgeon, for instructing the public in general, and soldiers in particular, in the art of bandaging. On the fabric of the handkerchief are printed in blue, outlines of the human frame, showing how bandages should be applied in almost every position ever required. These deserve the attention of all our readers, and of the Australian Health Society. Cocaine

and morphia wool, a remedy for toothache, is an idea which may find profitable application. Suspensory bandages and lumbago belts of spongio-piline are shown here with other things. The case is one of the most interesting in the exhibition from our special point of view.

Emil Schafer, Chemnitz, Saxony, represented by Weiler, Heidepriem & Co., Salisbury Buildings, Queen Street, Melbourne, has a good collection of surgical dressings, which illustrates the great development of the antiseptic treatment of wounds since the comparatively recent date when Lister first introduced the carbolic spray. Nearly every soft fibrous material known has been used for the body of the dressing, and the list of those shown comprises wood wool, cotton wool, china grass wool, glass wool, surgical tow, surgical turf, oakum, jute, and gypsum. These are treated with nearly every known antiseptic, from the commonplace carbolic acid, through salicylic, benzoic, chromic, and the deadly osmic acid, to corrosive sublimate, resorcin, and the like. Catgut for sutures is treated in similar fashion, and to preserve it from infection it is reeled on glass rods rotating in closed glass boxes, from which it is drawn as required like string from a box.

PERFUMERY.

Edwin R. Biggleston, Canterbury, England, exhibits his heliotrope essence, sachet, and soap, a highly esteemed perfume, combined in the latter case with pure white toilet soap; and also John R. Hall's Triple Extract of Wood Violets, and the Canterbury Wood Violet Sachet, of which he is the proprietor. The handkerchief perfumes are put up in miniature earbays, daintily embellished. The case stands in the main building. Roewe, Tomsitt & Co. are the Melbourne agents.

A fine display is made in the German Court of **Spielhagen's** transparent glycerine soaps, amber, wine coloured, and green. The feature of the exhibit is an obelisk of the soap surmounting the case, and fully exposed to the air. At the time of writing it shows no sign of change, which speaks well for its quality.

The Leipzig Indiarubber Factory (Leipziger Gummi Waaren Fabrik), formerly Julius Marx, Heine & Co., Leipzig, represented in Australasia by Mr. A. Bossomaier, select from their varied manufactures only perfume sprays for display at the exhibition. The sprays shown are of very high class. The rubber balls are very brilliant, and are said to stand the heat well. The vases are, many of them, prettily decorated, and in some cases the jet for the spray is made the centre of a silver or golden flower.

Lindenhahn & Giesel, Leipzig-Reudnitz, Germany, sole agents, Frederick Berndt & Co., Melbourne and Sydney, have a display of essential oils and colouring matters apparently prepared especially for confectioners' use. The essential oils include mace, cloves, cardamoms, cinnamon, anise, sandal wood, cedar wood, and Dutch caraway twice rectified, and specimens of the exhausted materials are shown, an unusual feature in such exhibits. Colouring matters and fruit essences complete the list, all the specimens being good.

L. Ziffer, Berlin N., the holder of an immense chain of medals, makes a speciality of cheese rennet in liquid extract, powder, and compressed globules. The latter is an excellent idea. Two sizes of globules are supplied, one of the larger being sufficient for 25 gallons, and one of the smaller for 5 gallons of milk. This form of rennet must tend to keep much better than either liquid or powder, and as no weighing or measuring is required, the globules should secure a large sale immediately they are known. Butter colouring and flavouring, the latter to give butter of second quality and margarine the flavour of prime butter, are also shown, and great prominence is given to a preservative powder for preserving food. It is stated that it alters neither the taste nor the colour of anything to which it is added. Paul Gutike, 338 Kent Street, Sydney, and at the exhibition, is the agent.

FOODS.

Stollwerck Brothers, Cologne, Germany, represented in Australia by Weiler, Heidepriem & Co., Salisbury Buildings, Queen Street, Melbourne, show, among other specialities, chocolate and cocoa in a variety of forms and qualities. The firm was established in 1829 for the manufacture of cough drops and cough lozenges, and **Stollwerck's Brust Bonbons**,

in their original yellow wrapper, are known to every child in Germany. The show-cards distributed by the firm are of remarkable beauty, and would ornament the handsomest and most tasteful pharmacy.

INKS.

G. Borman's Successor, Berlin (represented by Paul Gutike, at the exhibition, and 338 Kent Street, Sydney), manufactures some indelible inks with remarkable properties. Documents freshly executed with them, and merely blotted, can be immediately immersed in water without the ink running. They are sold in boxes of assorted colours, and should be invaluable to architects, to travellers, surveyors, and others who have important writings exposed to risk of wet. The same firm also manufactures artists' colours used by the German military authorities for the colouring of maps.

J. Robinson, 54 Alsen Road, Holloway, London, exhibits specimens of blue-black, black, and other writing and copying inks, well got up, and in larger bottles than is usual for the price. Mr. Robinson announces that he was for many years in the service of Mr. H. C. Stevens.

Cooper & Co., 5, 6 and 7 Shoe Lane, London, makers of Walkden's inks, have a good show.

SUNDRIES.

Geo. Pfaff, Wiesbaden, Germany, represented in Australasia by Pfaff, Pinschoff & Co., Melbourne, Sydney, and Brisbane, exhibits a great variety of specimens of capsules in a soft metal with brilliant surface, and decorated in different styles with bright-coloured varnishes. Small boxes of varied form made of the same material are also shown, and two small capsuling machines in which the jaws of india-rubber closely imitate the grasp of the finger and thumb in pressing down the capsule.

Franz Clouth, Vorstadt Nippes, near Cologne, represented by Mr. Otto Peez, at the exhibition, displays a variety of rubber goods. Conspicuous among them is a good-sized hard rubber pump, with all taps, valves, and necessary connections, for use with strong acids. The tourniquet brace devised by Professor Esmarch, the renowned surgeon, is shown here. They are convenient braces, and in case of hemorrhage from an artery in any of the limbs resulting from accident can be converted into a powerful tourniquet. Some teats shown are much larger than usual with English goods. Besides the articles mentioned, we have rubber fittings for perfume sprays, air and water cushions and beds, ice-bags, bandages, syringes, breast pumps, &c. So far as the external appearance is a guide, the goods are excellent.

MINERAL WATERS.

The Apollinaris Company (Limited), 19 Regent Street, London, exhibit Hunyadi Janos Water, the well-known aperient, which is being vigorously introduced in these colonies. The testimonials of such prominent men as Professor Virchow, Dr. J. Marion Sims, and Sir William Aitken, M.D., show that this has something more than a mere advertising reputation, and is a thoroughly reliable article.

The Helidon Spa Water Company, Brisbane, exhibit water from the spouting springs at Helidon. The water is said to spout to a height of 20 feet above the ground, at the rate of 2,000 gallons an hour. The mineral ingredients per gallon amount to 291.42 grains, of which 221.36 grains is said to be bicarbonate, and 48.08 grains chloride of sodium. There were 10.65 grains of bicarbonate of calcium in the sample analysed, and small percentages of bicarbonates of potassium, lithium, and magnesium. Traces of rubidium, of sulphates, phosphates, borates, and organic matter were present, but no iodides, bromides, or fluorides. The temperature of the water is 60° F., and the sp. gr. at 78° F. 1.00216. The date and author of this analysis are not stated in the catalogue.

SHEEP-DIPS.

Morris Little & Son, Doncaster, England, and 91 Bourke Street West, Melbourne (represented in the exhibition by Mr. P. R. Neale), have a large stand. The urinals at the exhibition are being deodorised by the firm's Soluble Phenyle, supplied in automatic tanks. As a disinfectant this preparation has some good testimonials from well-known Melbourne

and Sydney practitioners, and as an insecticide for fruit-tree from Mr. Geo. Neilson, Curator of the Royal Horticultural Gardens, Melbourne. As a sheep-dip it is universally known. Griffiths & Weaver, Hunter Street, are the agents in Sydney; John Grice, Kingston, and Geo. Ferguson & Co., Adelaide, agents in South Australia; Elliot Bros. (Limited), and the Queensland Land and Mortgage Company, in Brisbane.

Quibell Bros., Newark, England (a firm established in 1814), show sheep-dip in liquid (non-poisonous) and powder (poisonous), disinfectant food for lambs, and other similar preparations. The special feature claimed for the liquid sheep-dip is that not only does it destroy the vermin in the fleece, but it nourishes the wool, producing a much heavier fleece. It is recommended by several well-known British breeders, some of whom dip several times a year. Quibell's Infallible Disinfectant is said to be "far superior to carbolic acid." It is sold in liquid and powder.

MISCELLANEOUS.

Universal metal-polishing paste or pomade is shown in the German Court by **Carl Haslehorst**, Dresden, **Albert Vogt & Co.**, Berlin (agents, Pfaff, Pinschoff & Co., Melbourne, Sydney, and Adelaide); **Schmitt & Forderer**, Wuhlershausen, Cassel; and **Reimann & Adolph Lubszynski**, Berlin, S. O.; the latter firm announcing that they have disposed of eighteen million boxes during the last twelve months, a quarter going to England and the colonies. It is known in its native language as "putzpomade," and though we cannot attempt to say which is the "original genuine" article, there can be no doubt as to its polishing powers.

Schmedes, Erbsloh & Co., Sydney and Melbourne, are agents for the Johann Hoff's malt extract made by **M. Hoff**, Hamburg. A pyramid of the bottles is shown.

Day, Son & Hewitt, 22 Dorset Street, London, W. (agent, Arthur Turner, Market Buildings, Flinders Lane West, Melbourne), exhibit various medicine-chests of their well-known specialities. Nothing is wasted on mere French polish, the full value being given inside. On the lids are directions for using the articles, and a capital means of increasing the sale of the remedies is their half-crown "Key to Farriery." Horns for drenching cattle are also shown.

Mayer, Meltzer & Jackson, London, Leeds, Capetown, and Lonsdale Street, Melbourne, have a good collection of surgical appliances. Among these, many people will take most interest in a set of tracheotomy instruments as made by the firm for the late Emperor of Germany, Frederick III. Artificial arms and legs are also shown as made at the Melbourne branch, and special forms of trusses finished in the highest style of surgical millinery in blue, pink, and primrose silk.

Arundel & Marshall, London, have a good display of their plain and fancy boxes, parcel-post boxes, and corrugated paper for packing. Many colonial firms have already adopted the first named, and the parcel-post boxes with steel corners are likely to find more demand as tradesmen here learn to use the facilities offered by the parcel post. A special line is also shown of wooden boxes, the sides of which fold flat for economy of freight. H. B. Hardt is the representative at the exhibition.

Geo. Upton, 239 and 241 Franklin Street, Boston, U.S.A., shows his liquid glue and liquid fish glue, made, we understand, direct from fresh fish skins without the preliminary drying which is generally given but never benefits the product.

Sebastian Danielli, Sydney Road, Brunswick, Melbourne, exhibits alimentary paste for thickening soups, &c. In appearance it much resembles macaroni: it is made simply of the best flour with water, is subjected to great pressure, forced into the required shape, and when dried ready for use is a great boon in hot climates.

Valentine & Co., New York, show varnishes, carriage top dressing, carriage colours, &c. A very neat and attractive advertisement, sure to be preserved, is a small thermometer, graduated from 20° to 120° F., mounted on a card, and bearing an advertisement of the firm, and the legend "the temperature of a varnish-room should be maintained at 75° to 80° F."

PHARMACEUTICAL POLITICAL PROCLIVITIES.

POST-CARD COMPETITION No. 12.

WE have received 840 post-cards in response to our request for an indication of the political preferences of chemists, and their estimate of the percentage distribution of parties among the craft. Thirty-two of these cards were inadmissible for the purposes of the competition, the disqualification of the greater part of the number being attributable to the fact that the writers did not state their own political faith, but merely gave the forecast of the result, to obtain which the declaration of the political preference of the writer was, of course, indispensable. Some few post-cards were also rejected on the ground that, although written in the old year, they bore the 1889 post-mark, and reached us after the close of the poll. Of the 808 valid cards 384 are cast for Conservative, 335 Gladstonian Liberal, and 89 Liberal Unionist, the percentage proportion being, therefore, as nearly as possible:—Conservative, $47\frac{1}{2}$; Gladstonian Liberal, $41\frac{1}{2}$; Liberal Unionist, 11.

Not one among the competitors has managed to prognosticate the exact result of the poll, though some have descended to two decimals in their endeavour to give the exact proportion, one of these guessing—"C., 50.09; G. L., 37.52; L. U., 12.39 per cent.;" and another, "C., 48.35; G. L., 45.21; L. U., 6.54 per cent."

Three competitors, who have contented themselves with entire percentages, come as near the mark as was possible under the circumstances, their names and guesses being:—

MR. J. BROOKS, Whirby—C., 48; G. L., 41; L. U., 11.

MR. J. WATERS, 286 Roekingham Street, Sheffield—C., 48; G. L., 41; L. U., 11.

MR. S. P. SMITH, New Swindon—C., 47; G. L., 42; L. U., 11.

We, therefore, divide two guineas among these gentlemen.

An analysis of the cards received gives the following result:—

Districts	Conserv- atives	Glad- stonian Liberals	Liberal Union- ists	Total	Spoilt Votes
Metropolis	57	63	21	141	3
Liverpool	7	10	4	21	—
Manchester	11	9	2	22	—
Birmingham	11	—	6	17	—
Leeds	6	5	—	11	—
Other parts of England ..	247	201	41	489	17
Wales	12	9	4	25	4
Scotland	25	35	9	69	8
Ireland	5	3	2	10	—
Abroad	3	—	—	3	—
Total	334	335	89	858	32

It will be seen that the balance of political opinion as set forth on the cards is rather different from that which is usually considered to prevail in the districts enumerated, and we think we may safely say that as a political guide to the craft in general the poll is not of any considerable value. The proportional vote of the metropolitan district, for instance, is very heavy as compared to that of the remainder of England and of Scotland, while Irish chemists have certainly not polled anything like their numerical share. Our analysis of the cards convinced us that the well-known British habit of underestimating the strength of antagonists is strongly prevalent among all political parties, many Conservatives putting the Gladstonian percentage at under 20, and one with magnificent scorn going the length of forecasting "C., 80; L. U., 20; G. L., *nil*." On the other hand, some Gladstonian enthusiasts assigned to their own side 90 per cent. of the total votes. Counting all the cards, the estimated percentage proportion of Conservatives ranges from 15 to 90, of Gladstonian Liberals from *nil* to 90, and of Liberal Unionists from 2 to 50. We confess that at the commencement of the competition we entertained considerable misgivings that some of the competitors would not be able to restrain themselves in the present acute condition of political feeling from accompanying their voting cards with

uncomplimentary references to their opponents, or to ourselves for our, possibly, somewhat *risqué* intrusion upon their political privacy. But as the poll proceeded steadily but slowly (Her Majesty placing the Royal Mail carriages at the disposal of all parties with strict impartiality), we soon perceived that our apprehensions were unfounded. Comments on the votes were few, possibly from want of space. One nervous politician, posting his card from a small country village, begs us to "pray keep the information dark or you would ruin me." Our friend may take heart of grace—not even the application of the rack would drag from us the portentous secret of his vote. An enthusiastic Liberal observes that in his forecast "the existing Council of the Pharmaceutical Society have not been taken into consideration, for one would judge that there are on that august board about 90 per cent. of fossilised old Tories." And another is of the opinion that "if the majority of chemists were Gladstonian Liberals they would not allow the present absurd and incompetent Council to exist, but would combine and put in a better and more businesslike class of men, who would frame a Bill and agitate for the better protection of chemists." Another voter of the same colour "does not see how we can form a true estimate, as only subscribers are voters, and who are the non-subscribers, and therefore non-voters, but the fossil, Conservative, short-sighted members of our calling?" while yet another takes the opportunity of having a "go" for his *confrères* by observing that, "judging from the trade at large, one would think the majority consisted of fossilised old Tories, more especially the Pharmaceutical Council." On the other hand, a Conservative voter declares that all chemists ought to belong to his side "because our cry is perpetually for protection"; and one with a fellow-feeling expects the result to be in favour of the Conservatives because chemists are of more than ordinary intelligence. A competitor from Colechester exhorts us to "vote for Girdon." There is one "Conservative Home Ruler" from the North, whose vote we had some difficulty in allotting, but whom we ultimately decided to count as a Conservative.

Practical Notes and Formula.

ANTISEPTIC SACCHARIN DENTIFRICE.

DR. CONSTANTIN PAUL proposes the following formula for an agreeable dentifrice:—

Saccharin	6 grammes.
Bicarbonate of soda	4 "
Proof spirit	100 "
Oil of peppermint	20 drops
Tincture of cochineal	q.s.

BLUE-BLACK WRITING INK.

A CORRESPONDENT of the *Scientific American* submits the following formula:—

Tannic acid	200 grains
Gallie acid	50 "
Protosulphate of iron	1 oz.
Indigo carmine (neutral)	320 grains
Powdered cloves	5 "
Water	1 pint

Dissolve the tannic and gallie acid in the water. To this solution add the iron salt, and filter through cotton. Then add the indigo carmine, and lastly the cloves. One good copy can be obtained from this ink.

INJECTION BROU.

THE *Journal de Pharmacie* gives the following new formula for this injection:—

	Grammes
Opium	0.50
Catechu	0.50
Saffron	1
Boiling water	200
Infuse, filter, and add	
Acetate of lead	1.50
Sulphate of zinc	3
Mix.	

Medical Gleanings.

RICKETS

Are generally referred to abroad as the "English disease." In regard to treatment, Dr. Schultz, of St. Olga's Children's Hospital, Moscow, uses a mixture which consists of 2 parts of phosphorised oil of the strength of 1 per cent., with 40 parts of almond oil, 21 of gum arabic, 200 of peppermint water, and 50 of syrup. Of this emulsion a teaspoonful is given every night, and in twenty-five cases all but two were decidedly improved.

A REMEDY FOR WARTS.

MR. G. E. J. GREENE, of Ferns, Co. Wexford, communicates a note to the *British Medical Journal* on the use of the *Euphorbia helioscopia* as a remedy for warts. This is a common plant on waste places and in kitchen gardens. It varies in height from two inches to two feet, and bears in July and August comparatively large heads of greenish-yellow flowers having the characteristics of the British euphorbias. It has been variously termed the wart weed or wart wort, and, though occasionally used by the peasantry for the removal of warts, is not generally recognised as a useful remedy. [The euphorbias have been used from time immemorial for the purposes indicated.—Ed.] Mr. Greene has, however, been very successful with it. His mode of using it is as follows:—First the wart is pared with a sharp knife, then a piece of the stem of the plant is applied to it, and renewed three or four times daily. When a scum forms, consisting of inspissated juice and disintegrated epithelium, it must be removed before again using the remedy. This treatment has the advantage of being painless, and leaves no mark.

FLATULENT DYSPEPSIA.

DR. PEPPER recommends the following prescriptions for the treatment of those cases of dyspepsia in which flatulence causes much annoyance:—

Acidi sulphurosi	℥ss. vel ℥ij.
Liq. strychnine	℥j.
Tr. card. comp.	℥ss.
Aque ad	℥iv.

M.

One drachm after meals, in water.

Creosote has a similar antiseptic action. It is best given about one hour after meals, when the process of fermentation is about beginning. At this time, Dr. Pepper states, the gastric digestion should have passed through the acid stage, and the contents of the stomach should be neutral or alkaline. The creosote may be advantageously given as follows:—

Creosoti	gtt. x.
Sodii bicarb.	℥ij.
Pulv. acacie	q.s.
Aque	℥v.

M.

Two drachms one hour after meals.

In place of sodium bicarbonate subnitrate of bismuth may be employed, and, should the digestive powers be weak, pepsin may be added, thus:—

Pepsin porci	℥j.
Creosoti	gtt. x.
Bismuthi subcarb.	℥ijss.

M. et fil. pulv. No. xxx.

One powder, in a small gelatine capsule, can be given one hour after each meal.

Powdered charcoal, with soda or bismuth, given a couple of hours after meals, frequently affords a great deal of temporary relief.

CORNS AND WARTS.

NEW methods for the removal of these troublesome excrescences are always welcome to chemists, who are more consulted regarding them than doctors. The following are suggestions which have recently been made. The first is by Dr. Unna, the celebrated dermatologist, and is communicated

by Dr. Allan Jamieson to the *Edinburgh Medical Journal*:—A ring of glycerine jelly about the diameter of the wart is painted round it with a fine but stiff bristle paint-brush. When this ring of jelly has quite set and become dry, a circular piece of the strongest salicylic plaster muslin (salicylic 40, creosote 40) is cut sufficiently large to fit within the ring of jelly; jelly is now painted over the ring of jelly already made, and the piece of plaster itself; and, to make assurance doubly sure, a third coat of jelly should be painted widely over all. When these have become almost dry, a layer of cotton wool is to be placed and pressed on. The larger the surface covered with the jelly the less the local pressure on the corn. A single turn of a soft muslin bandage folded round the affected part keeps the plaster in position. The dressing is changed once or twice a week, the horny layer acted on by the salicylic acid is removed, and a new dressing applied. The glycerine jelly used may be such as formula vi. "Art of Dispensing," page 104.

Dr. Greene states in the *British Medical Journal* that the feet should first be bathed in lukewarm water for about fifteen minutes, then pare away with a sharp knife the upper part of the corn; after which apply the following:—

	Parts
Acid. salic.	2
Collodii flex.	4
Creosoti	1

with a camel-hair brush or feather, and allow it to dry. This treatment to be repeated every day, or other day, as required.

Mr. Sherman Bigg, of Dover, gives some hints which are mainly surgical. He says:—Pare the corns carefully with a sharp knife without drawing blood, and lightly apply the solid stick of nitrate of silver. In the course of two or three days scrape away the hardened surface. A small, delicate, pinkish blister will be seen, which should be painted over with a 5-per-cent. solution of cocaine, and a small crucial incision made. Usually a bead of pus will escape. Apply lead lotion dressing.

BOILS.

DR. T. L. CRAIG (*Med. and Surg. Rep.*) recommends the following treatment for boils:—

Tinct. ferri perchlor.	gtt. xv.
Liquor. arsenicalis	gtt. iij.
Aque	℥ss.

Take at a dose after each meal.

Use carbolised camphor locally, and a poultice when there is much inflammation. Also give small doses of Epsom salt to prevent constipation.

TONSILLITIS.

SIR MORELL MACKENZIE recently gave in Edinburgh a clinical lecture on this affection, and in the course of his remarks, as reported in the *Edinburgh Medical Journal*, he said:—"A person who has once had acute tonsillitis never really gets well, though he may appear to do so. The treatment, therefore, is important. One of the most popular remedies is aconite—originally, I believe, a homoeopathic drug, but now used extensively by allopaths (though I object to the term)—and strongly recommended by Dr. Ringer. It has certainly never, in my hands, proved to be of the extraordinary value which he asserts. On the other hand, I have found guaiacum, which used to be given in the form of the ammoniated tincture, very efficient. I recollect a Manchester surgeon, Dr. Crompton, who used to come a good deal to the Throat Hospital about the time it was founded, telling me I should find much more benefit by giving it in the form of a powder; and I did so, letting the patient take a pinch of the resin. This was rather disagreeable, and after a time I had it made into lozenges containing about three grains in each. In this form it makes an excellent remedy. Nine cases out of ten will get rapidly well if one of these lozenges is given every two hours at the outset. I sometimes also apply locally a little bismuth and opium, or an eighth of a grain of morphia with a quarter of a grain of starch, because the problem is not only to cure the patient, but to keep him comfortable till he is cured. Sometimes the guaiac causes a little diarrhoea, which is not altogether disadvantageous, but the morphia is usually sufficient to check it."

CARBOLIC ACID IN CONDY'S FLUID BOTTLE.

IMPORTANT PROSECUTION UNDER THE MERCHANDISE MARKS ACT.

AT the Wandsworth Police Court on Thursday, January 3, before Mr. Bennett, a case of considerable interest was heard, in which the proprietors of Condyl's Fluid had taken proceedings against a local tradesman, under the new Merchandise Marks Act, for selling carbolic acid under circumstances calculated to lead the public to think it the disinfectant manufactured by them. The defendant was William Hall, of 1 Somerset Terrace, Merton Road, South Fields, Wandsworth, and he was charged, on an information laid by Mr. Alexander David Mitchell, with having "unlawfully sold to Ann Thursby, of 11 Dunsford Villas, Merton Road, as and for a bottle of 'Condyl's Fluid,' certain goods, to wit, one bottle labelled with labels containing such figures, words, marks, and arrangements and combinations thereof, as were reasonably calculated to lead persons to believe that the goods contained in the said bottle were 'Condyl's Fluid,' and the manufacture and merchandise of Messrs. Condyl & Mitchell (Limited), of 67 Turnmill Street, Clerkenwell, whereas such bottle did not contain 'Condyl's Fluid,' nor any goods which were the manufacture or merchandise of the said Messrs. Condyl & Mitchell (Limited), but goods which were the manufacture and merchandise of some persons other than the said Messrs. Condyl & Mitchell (Limited), to wit, crude carbolic acid." Under a second summons Hall was charged with having unlawfully "sold certain goods and things, to wit, a bottle containing a certain fluid, and labelled with labels whereon were a description and indication—to wit, the words 'Condyl's Fluid' and other words and marks—that the contents of the said bottle were composed of the same material as Condyl's Fluid is composed of, and which said description and indication were false in a material respect as regards the goods contained in the said bottle to which the said description and indication were applied, viz., in that the said goods were not composed of the materials of which Condyl's Fluid is composed, or Condyl's Fluid at all, but were crude carbolic acid." Mr. Dankwaert, barrister, appeared for Messrs. Condyl & Mitchell, and defendant was represented by Mr. Bell.

Mr. Dankwaert, in opening the case, said the facts were very simple. On November 28 last a Mrs. Thursby wanted a bottle of Condyl's Fluid for her daughter, who was in a very delicate condition, the intention being to use it as an injection. She accordingly went to Mr. Hall and ordered a bottle of Condyl's Fluid. A bottle was sent in some time afterwards, but when Mrs. Thursby opened it and poured some of the contents into a gallipot preparatory to using it, she immediately saw that the liquid was not what it should be. Dr. Dickinson, who was attending the daughter, afterwards arrived, and saw at once that the bottle contained carbolic acid. As his Worship was aware, crude carbolic acid was a most dangerous poison. Unhappily, a great deal of bad use had been made of it lately, and had it in the present case been used as was proposed it might have led to her serious illness, if not to her death. Consequently, although the facts were simple, it was a very flagrant case. When Dr. Dickinson saw what the contents of the bottle were, he forwarded it to Messrs. Condyl & Mitchell, who were the owners of the trade-mark "Condyl's Fluid," and the makers of the preparation. They immediately saw that the liquor contained in the bottle was not of their manufacture, and it had since been analysed by an expert, who said it was pure carbolic acid. Now the price of such a bottle of Condyl's Fluid was 6d., whereas the value of the same quantity of carbolic acid would be about 1d. Mr. Hall, when communicated with, said he got the bottle from Messrs. Condyl & Mitchell themselves in 1887, but it was utterly impossible that that could be the case for two reasons. In the first place, the bottle bore a label which was certainly one of Condyl & Mitchell's labels, but one which had not been used by them for more than two years. Secondly, the cork had sealing-wax upon it, whereas Condyl & Mitchell always cut their corks off level and did not use wax, which was deleterious to the fluid. Of course anyone buying such a bottle from a tradesman would think at once that he had obtained the fluid manufactured by Condyl & Mitchell—nothing,

indeed, could be more calculated to satisfy people that they had got the genuine thing. The learned counsel proceeded to quote the sections of the Act on which he asked for a conviction, pointing out that it rested with defendant to prove that he had taken proper precautions to see that the article he was selling was genuine. He might add that Condyl & Mitchell did not have carbolic acid on their premises at all; in fact, it in no way entered into the composition of Condyl's Fluid. His clients had instituted the prosecution entirely for this reason:—They knew that their fluid was used in all sorts of delicate junctures; used, moreover, by the poor, who could not easily distinguish the right material from the wrong. Hence, solely for the purpose of calling attention to the matter, and in order to protect the public generally, they had felt it their duty to bring the case before his Worship.

Mr. Alexander David Mitchell said that he was managing director for Condyl, Mitchell & Co., and one of the proprietors of the trade-mark "Condyl's Fluid," of which preparation the firm were the sole manufacturers. Both the labels on the bottle produced were those of his firm, and he had no doubt that at one time the bottle had contained their fluid. They had never, however, used sealing-wax, which was affixed to the cork of the bottle produced. Their corks were treated with paraffin to prevent the action of the fluid on them. The cork produced had never been so treated. The bottle was a 6d. one; it left his firm at about 4d. He believed the price of an equal quantity of carbolic acid would be a very small fraction of that sum. His firm did not use carbolic acid at all, and never had it on the premises. One of the labels on the bottle was used till the early part of 1886, when it was superseded, and since then no such label had been sent out. Defendant had lately sent a small order for a fresh supply of the fluid.

Cross-examined, witness said that Mr. Hall was also supplied with a consignment of goods in May, 1887. He would swear, however, that the bottle produced was not one of those which were then delivered. Their sale was very large—many hundreds of thousands of bottles yearly—but he could swear that that bottle was not sent out in 1887, because of the label. There could not have remained a bottle so labelled, because the stock never lasted more than a fortnight or three weeks.

Mr. Bell: I may say at once that my client is going to swear most positively that it is a bottle which he received in 1887 with that invoice.—I swear positively it was not. A bottle would pass through the hands of five or six people before leaving the premises. I have no knowledge as to what happened to it after it left.

Mr. Bell: You have heard, perhaps, of things being altered by the way. What would be the price of a bottle of carbolic acid that size?—I should say that 6d. would be very dear.

Mrs. Ann Thursby, of Dunsford Villas, Merton Road, Wandsworth, deposed that on November 19 she ordered at defendant's shop a bottle of Condyl's Fluid, which Mr. Hall said he would send up. She was told that 6d. was the price, and on saying that she had previously paid 1s. was informed that the fluid in the cheaper bottles was less strong. It was sent home labelled and wrapped up in the usual way, but there was sealing-wax on the cork. That she did not notice at the time, but the smell when she opened the bottle showed her that it was not the same stuff as that which she usually used, and she put it on one side. She had used Condyl's Fluid for nine years at her daughter's confinements.

Cross-examined: She noticed the strong smell as soon as she opened the bottle. The contents could not have been changed while it was in her possession.

Mr. William Gilbert Dickinson, surgeon, of South Fields, said he had attended the daughter of the previous witness, who drew his attention to the bottle. He poured out some of the contents, which he at once saw was not Condyl's Fluid, but seemed to be crude carbolic acid. That substance was an irritant poison, and would be a very dangerous thing to put to the uses for which Mrs. Thursby purchased the bottle in question. He afterwards sent the bottle to Messrs. Condyl & Mitchell.

Mr. Hoff Price, foreman to Condyl & Mitchell, corroborated Mr. Mitchell's evidence as to the bottle having some time ago been sent out by the firm. Bottle and labels were both

theirs, but one label had not been in use since the beginning of 1886, and, in addition to being waxed, the cork had not undergone the preparation usual with their corks.

Cross-examined: The bottles were sent out almost as fast as they were filled, and very few were ever kept in stock. If any old labels were found by a workman they would not be used, but burned. He was quite sure that the bottle had been tampered with after leaving their premises.

William McCorquodale, printer, of Cardigan Street, Hampstead Road, produced his books, which showed that one of the labels on the bottle sold by defendant had not been printed for Condry, Mitchell & Co. since February, 1886.

Mr. Otto Hehner, public analyst for a number of counties, said he had examined the liquid contained in the bottle. It was ernde carbolic acid, containing about 60 per cent. of the acid itself, which was an irritant poison. He did not know what the price of enough carbolic acid to fill the bottle would be. There was no carbolic acid in Condry's Fluid.

This was the case for the prosecution, and Mr. Bell, reserving his observations, called

The Defendant, who said he had been in business at his present address since March 1887. In that year he ordered and received from Condry & Mitchell twelve 1s. and twelve 6d. bottles of Condry's Fluid. On November 19 last he received from Mrs. Thursby an order for a bottle, which he caused to be sent to her in the usual course. That bottle was one of those which he received from Condry & Mitchell.

Mr. Bell: Had you tampered with that bottle since you received it from Messrs. Condry?—Certainly not.

Mr. Bell: The suggestion, I suppose, is that for the purpose of gain you emptied the contents out of the bottle and replaced them by something else, worth less money. Is there any truth in that suggestion?—Certainly not. The bottle left my premises as I received it. I subsequently received a letter from Mr. Saloman as to the bottle, and saw him at his office, where I gave him what information I could. He asked me if I bought any old bottles, and I replied "No."

Cross-examined: The bottles were brought to my shop by a young man from Messrs. Condry's. I think this one was wrapped up when it left me as it was when it came, but I cannot remember exactly. The only book I have is one in which orders are set down for goods which are not taken away at the time. I have no 6d. bottles left of the lot ordered in 1887. I have not searched my books to see if any other bottles are entered as having been sold—but I have really no books to search.

Mr. Dankwaert: What precautions did you take to see that you were selling the fluid which you got from Messrs. Condry?—None whatever. I knew that the bottle came from them because I had none other in the place. I have never bought any from any other person, nor did I tell Mr. Saloman that I had done so. I did say to him I bought some of the surplus stock of an oilman from a Mr. Harding, and I thought there might have been a bottle of the fluid with that.

Mr. Dankwaert: Have you made search to see if you have made any purchase anywhere else?—I have no books to search; but I made no such purchase. I do sell carbolic acid. I do all the buying myself.

Mr. Bell: You have been asked one or two things as to your precautions. When you received this consignment from Messrs. Condry had you any doubt as to its genuineness?—No.

Mr. Bennett: Have you been through your books to see what other fluid you have sold?—I have not; but I am sure none of the other sales would be entered, as they were made directly over the counter.

John Mountford, defendant's assistant, said he was present when the goods from Messrs. Condry were delivered by a young man. The bottle sent to Mrs. Thursby was taken round by witness, and there was nothing about it to attract special attention. He knew that no Condry's Fluid had come on to the premises, except the consignment in 1887.

Cross-examined: He did not look to see whether the wrapper was intact.

Mrs. Thursby, recalled, said the bottle was wrapped up similarly to that produced, but contained no little book and no extra cork. The paper, too, was of poorer quality.

Mr. Mitchell was also put again into the box, and stated that all bottles sent out by the firm during the last five years had been wrapped up in the same way.

Mr. Bell addressed the Bench for the defence. He said no reasonable person could doubt that the bottle as delivered

to Mrs. Thursby had been tampered with since it left Messrs. Condry's factory. The only question his Worship had to determine was whether he could fix the guilt upon the defendant. Of course it was an important matter, both to the public and to his client; because if Mr. Hall was convicted, he would be convicted of committing a most outrageous fraud on the public, since if it had not been detected it might have cost the patient for whom the fluid was procured her life. He submitted that defendant came well within the exceptions specified in the Act, which provided that if a vendor had taken all reasonable precautions and had no reason to suspect the genuineness of the trademark he should not be held liable. In the present case the goods were ordered and received from Messrs. Condry, were stored upon the shelf, and were taken thence and sold in the ordinary way of trade. The bottle had been tampered with, certainly; but what reason could Mr. Hall have for doing it? Could it be believed that any reasonable man, holding a position like the defendant's, would empty a bottle and fill it up with an inferior article for the sake of the almost infinitesimal profit which would accrue? He asked his Worship to say that it had not been made out to his satisfaction that the adulteration had been committed by the defendant or his agents.

Mr. Dankwaert argued on the point of law that the onus of satisfying the Bench that all the requirements of the Act had been fulfilled rested upon the defendant.

Mr. Bennett, in giving his decision, remarked that he thought the prosecution a most proper one for Messrs. Condry to have brought before the Court, since it was clear that the thing sold under their label was of an entirely different character to their fluid, and was calculated to do an infinite amount of injury to people who might use it thinking it a harmless preparation. Instead of that it was an irritant poison, and it was for the defendant to prove that he came within the exceptions named in the Act, which made such sale an offence unless he could prove certain things. That the bottle containing carbolic acid was sold by the defendant he had no doubt. With respect to the wrapper, he did not know that Mrs. Thursby could quite be trusted, because she was more interested in getting to the contents of the bottle than in the wrappers. Fortunately, she did notice that the contents were different from the Condry's Fluid which she had been in the habit of using. If she had not done so the preparation might have been used, and might have caused serious illness, if not death. What was the defence? Defendant said, virtually: "I bought certain things of Messrs. Condry as long back as 1887. I do not keep any books; I do not take any stock. I cannot tell how or when I sold the other bottles, and the only entry I have of disposing of any of them relates to this particular bottle. I have not even taken the trouble to look through such books as I have. I was not going to trouble myself about it." That was not the evidence which would satisfy him (Mr. Bennett) that defendant had taken every reasonable precaution against the commission of an offence under that Act. He (the magistrate) did not think defendant had taken all reasonable precautions. He thought that a man who sold patent medicines ought to have books to enter the sale of them, so that he might know what he received and what he sold, and not sell in that haphazard way, without any stock-taking whatever. He did not say that he believed the defendant had acted intentionally, and for the purpose of deceiving Mrs. Thursby, or that he wilfully sold carbolic acid for Condry's Fluid; but that he did sell it there was no doubt, and in his (Mr. Bennett's) opinion without the reasonable precautions which should have been taken. He thought there must be a conviction; and then arose the question of amount. Of course if it had been a case in which he thought defendant had acted wilfully he should not have thought the greatest term of imprisonment which he could inflict too severe a sentence; but he was not of that opinion. He thought that defendant had acted negligently and not wilfully—indeed, it was not suggested by the prosecution that he had acted wilfully—and he considered that the demands of justice would be met if Mr. Hall were ordered to pay 5*l.*, being a fine of 20*s.* and 4*l.* costs. That was on the first summons. He had no doubt Messrs. Condry would withdraw the second.

Mr. Dankwaert: Certainly, sir.

Mr. Bell intimated that he should appeal.

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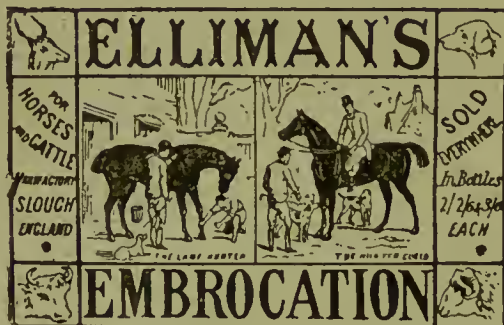
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EDITORIAL NOTES.

FRENCH PHARMACY LAW.

THE French Chamber of Deputies has just authorised the publication of a new report of the latest commission appointed to consider the relations of pharmacy and legislation. Reports of this kind are published with fair regularity about once every five years, and always furnish very interesting reading. The present one is no exception to the rule. It is a composition of historic value, compiled with great literary skill. M. Alfred Letellier is its author, and his colleagues on the commission, who presumably have assisted to inspire the document, were MM. Simonet (president), Fernand Faure (secretary), Duval, Brugère, Ducoudray, Godet de la Ribonillierie, Dupuy, Guillemant, Sabatier, and Vacher. Attached to the report, and as a consequence of it, is a "project of law," or Bill, which will serve to provide some acrimonious discussions between the pharmaciens and their natural enemies the doctors, the specialists, the religious associations (who supply medicines), and others, but is hardly more likely to succeed than the dozen or two of its predecessors in the same field.

The commission first agree generally on what seems to them the axiomatic truth, "that the practice of pharmacy cannot be assimilated to ordinary commerce; that it would never do to allow anyone who pleased to prepare or sell medicaments or poisons without exacting from him special guarantees." They go on to show that the Constituent Assembly were disposed at one time to adopt the contrary wild opinion. On March 2, 1791, they resolved that anyone should carry on such business, profession, trade, or art as might find favour in his eyes; but on April 14 of the same year they re-enacted the old pharmaceutical laws and kept them in force until they found time to plan out their own idea in the famous law of "21 Germinal, year XI," which, amid all the many revolutions since, has been the legislative code of French pharmacy to this day.

The principal points left doubtful in the law as it now exists are enumerated. The first is whether a pharmacien may be the proprietor of more than one pharmacy. Secondly, can an unqualified person be proprietor of a pharmacy if qualified men manage and conduct it? Can he be associated with a qualified man as partner? Must he reside at his pharmacy? Can pharmaciens qualified abroad be authorised to carry on business in France? These are points which are not clear in French law, and which have been variously decided by the Courts.

But the real rock on which all these projects of law are wrecked is that of secret medicines. French legislators have always felt it to be their duty to protect the nation from the possible dangers lurking in the unknown medicinal compound; but this sense of duty has ever been tempered with a careful regard for the commercial interests of France. French medicinal specialities have a considerable sale through Spain, Italy, Greece, Turkey, and South America, and the Chamber is very delicate in regard to this export business. In the year XI. (1803) the Constituent Assembly resolved to destroy the secret medicine business root and branch; but in the year XIII. some modifications of the original law were adopted. Then, in 1810, the Government appointed a commission to examine the claims of certain popular preparations, and buy up such as seemed to have real merit. This was a capital plan for ensuring the perpetuation of the crop of these semi-illegal products. The present system of authorisation of specialities by the Academy of Medicine dates from 1850, and is so contrived as to maintain the principle of disallowing secret medicines while interfering as little as possible with the speciality business.

The new Bill formulated by the Commission may be briefly summarised. First, the Commission decline to accede to the demand of many pharmaciens that they should have the same monopoly in the preparation of veterinary medicaments as they have in regard to those for human treatment. They make it clear that no one is to practise pharmacy in France unless he hold a French diploma. They propose to abolish the second-class grade of pharmaciens; no pharmacien is to be the possessor of more than one pharmacy, nor may he carry on in his pharmacy any business outside that relating to the art of healing. Association between pharmaciens and non-pharmaciens is to be permitted, on condition that the former have the sole management of the business and are constantly present; but no association is to be tolerated between a pharmacien and a physician, or a pharmacien and a veterinary surgeon, whereby gain could be shared between the two out of the prices charged to the public. A doctor may himself supply medicines only if he resides at least ten kilometres distant from a pharmacy. Manufacture and wholesale trade are not to be interfered with. Herbalists are to be abolished, but a list of plants that may be sold

freely and of drugs which may be supplied by anyone is to be published in the Codex, and that work is to appear every ten years. The widow of a pharmacien is authorised to carry on his business for a period not exceeding twelve months, but she must have a qualified man as manager. Hospitals, co-operative societies, and such bodies may have a pharmacy on their establishments for their own service, but it must be under the control of a qualified pharmacist.

Such is an outline of the latest scheme for pharmaceutical legislation which is now before the French Parliament.

THE PATENT-MEDICINE TRADE.

THE comparative collapse of the patent-medicine trade, or, rather, of its profits, is by this time an almost universal experience among chemists and druggists. It is not surprising that it should excite from time to time a few chords of mutual sympathy, unavailing regrets, and suggestions, hopeful and the reverse, as to the means of meeting the new order of things. The letters published by us in the last few weeks of last year included specimens of all these varieties. The correspondence began with the bold suggestion that chemists should refuse to supply these so-called patent medicines, seeing that they could no longer get any profit out of them. "Why should not chemists stamp them out?" was the question asked. It was soon apparent that there was no hope of general assent to a crusade of that character. Most of us felt on reflection that, while the little revenge suggested was tempting, chemists setting out on this sort of murder expedition would not get far beyond suicide. Moreover, notwithstanding all the cutting, it was not forgotten that there is still some profit to be got out of the patent-medicine trade, directly and indirectly, and prudence urged that it would be bad policy to teach customers to go to some other class of shop when they want medicine of any kind. Another suggestion put forward was one which has been heard of at intervals for many years. It was urged that the principal patent-medicine vendors should agree to supply only those firms who would in their turn agree to distribute only to such retailers as would bind themselves to sell only at the marked prices. The amount of confidence in one another demanded by such an arrangement is greater than our poor humanity seems able to supply; and the sacrifice which the proprietors would make is obvious. They would have to throw out their largest retail agents all over the country, and their compensation would be nothing but the chance of a little more favour, or, perhaps we should say, a little less animosity, on the part of the chemists. We are quite aware that chemists can do much either for or against a patent medicine, especially when it is new, but they cannot counteract the faith of the true believers in these articles, nor can they expect that their influence, however great it may be, will be appreciable against the subtle power of printed advertisements meeting the eye in every direction.

The scheme of maintaining marked prices by means of an agreement between all dealers in them was actually tried a few years ago in the United States on a very extensive scale. All the leading houses went into it more or less enthusiastically, but it failed from the outset. The cutters never ran out of stock of any of the leading articles; they made glorious capital out of the attempt to boycott them, and new makers saw their opportunity of bringing their goods into competition. The system was abandoned without a regret by anyone.

What, then, remains to be done? Sell your own articles whenever you can, and keep other people's goods in the background, is the advice given by several correspondents. We do not wish to controvert it, but we may perhaps hint

that this advice may be adopted much too completely. Customers generally go into a chemist's shop as they go into any other, knowing what they want and wishing to get it. They may sometimes submit to the blandishments of the gentleman behind the counter, but they understand for the most part the inner purpose of his arguments, and they are apt to avoid him in future. On the other hand, there are many customers who visit a chemist's shop without having made up their minds as to what they really want. With such it is of course legitimate and reasonable to use the influence of superior knowledge.

The discussion leaves chemists, we imagine, in much the same position as they were in before it began. They must settle themselves into the conviction that for the popular patent medicines, at any rate, full prices are no longer to be obtained. The loss must be made up by a quicker and larger turnover or in other directions. For many chemists the new system has been a blessing in disguise, as it has forced them to turn their attention to more profitable branches of their business; and to all it has brought home with force the consideration that success in business nowadays requires more watchful attention and more originality than were demanded of our predecessors.

OPENINGS IN AUSTRALIA.

THE class of men suited for Australia are, in general terms, those who are likely to succeed in England. Those who fail in England have an equally good chance of failing in Australia. The men wanted there, but not in large numbers, are youngish men (25 to 35) who hold the Minor or Major certificate of the Pharmaceutical Society. This is so important as to be almost an essential; with either of these certificates the way is open in all the colonies; without it there is no chance of getting beyond assistantship, except by working through the whole curriculum, and few Englishmen landing in Australia are likely to undertake this. What they are more likely to do is to look out for some other occupation, or drift. Equally important is it that the new arrival should be possessed of good character; he should certainly take out with him such testimonials as he can command, but not much trust is placed in these. His sobriety, reliability, and general intelligence must make themselves evident in time, and these will ensure success. Moreover, the emigrant should have had a good experience, and must not mind long hours. The chemists generally work from eighty to a hundred hours a week. On arriving the British chemist should first get into a situation, as he cannot think of going into business until he has acquired some colonial experience, and should also make himself known to one or more of the wholesale drug houses of the colony, who will interest themselves in his welfare. He will find it of great advantage if he is able to command a capital of 200*l.*, 300*l.*, or 400*l.* Men qualified as we have described are more certain to succeed in the drug business in Australia than they are in England, unless too many of them rush for the plums. We would advise any who go to visit our office at Normanby Chambers, Melbourne, immediately on their arrival. They will there obtain a good deal of information, and perhaps get introduced to just such an opening as they may wish for.

THE CONSERVATISM OF PHARMACY.

WE leave to the report of our political competition, published to-day, all considerations of the relation of pharmacists to imperial politics; nor shall we venture to trace any analogy

which may exist between this vote and the regard for tradition in medicine which recent correspondence has brought forth as a potent pharmaceutical characteristic. We are, indeed, inclined to the belief that as a rule the pharmacist's professional existence exercises no control over his political preferences, and therefore that the conservatism which we more particularly refer to is something *sui generis*.

In his introductory paper on "Tinctures" Mr. Fletcher furnishes strong proof of the regard for the ancient maceration process in the preparation of this most numerous class of Pharmacopœial galenicals which still prevails in official circles. There is much else in the British Pharmacopœia which is hopelessly behind date, though it is evident from the last edition that in regard to our materia medica and pharmacy there is a tendency to conform to later technical developments.

One of Mr. Ince's aphorisms given in "The Art of Dispensing" reminds us of a very old practice which is still in favour in some of the leading establishments in London and the provinces. "Hold the scales firmly by the left hand," says Mr. Ince, "never lift them high above the counter," and so on. What is astonishing is that this piece of advice is not out of date; as a matter of fact it is very opportune. Not so many years ago our examiners had to discuss with all due solemnity the question of providing a modern dispensing balance for the use of candidates unaccustomed to the old-fashioned apothecaries' scales, and the provision was made, but the use of the improved apparatus was not to be encouraged. While paying all due respect to the opinions of those who uphold the superiority of the hand scales, we cannot forget that the accuracy of a balance depends primarily upon the rigidity of the standard and the delicacy of the beam; it is, therefore, from this point of view difficult to see where is the weakness of a rigid metal standard in comparison with its rival, the nerve-controlled fingers. In this matter it would seem that conservatism must be the dominating factor.

The mint-water difficulty, which has lately been revived in our columns, is not quite in the same category. The discussion has shown at least one thing pretty clearly, and that is that there are physicians of the old school, so far as training is concerned, who understand "*aqua menthæ*" to mean spearmint water. Our correspondents have endeavoured to prove that this interpretation is based not only on custom but on authoritative definition. We, on the other hand, tried to show that official definition was never very decided; that since peppermint was introduced it has gradually superseded spearmint as a favourite carminative amongst physicians; and that it is now so much more used than spearmint that when doubt arises the course which the dispenser should pursue, *ceteris paribus*, is to give the preparation which is in general use. Our suggestion is, however, totally opposed to the custom followed by many of the foremost pharmacists, some of whom we should hesitate to rank amongst those of conservative tendency. But it would seem from the expressions of some of those that they had followed the old custom without giving a thought to the growth of a new race of physicians to whom spearmint is comparatively unknown. It is noteworthy that Scotch opinion is unanimously against spearmint, this probably being due to the fact that the water was removed from the later editions of the Edinburgh Pharmacopœia, and the consequent extinction of a custom. Yet this would not seem to be a national characteristic, for the old sweet spirit of nitre (P.L., sp. gr. 850) is just as much a favourite there as at this side of the Border, and almost the same may be said of the old sal volatile (spt. ammon. co., P.L.) This introduces a good example of the conservatism of the

public in regard to old medicines. The public palate is dainty, and will not accept a compromise. Unhappily, the aromatic spirit of ammonia is a compromise, and the public will not swallow it. It will be remembered that the London Pharmacopœia sal volatile was flavoured with cinnamon, cloves, and lemon; the Edinburgh preparation with lemon and rosemary; and the Dublin with cinnamon, lemon, and nutmeg. Now the British Pharmacopœia spirit is flavoured with lemon and nutmeg, apparently a concession to Dublin. Nutmeg is by no means a favourite carminative, it is positively abhorrent to many people, and of all the flavours is the most medicinal apart from its carminative properties. Yet we have it thrust upon two unwilling nations, and after eighteen years' unpopularity we have a popular synonym given to the spirit to which it imparts the strongest characteristic. The public is conservative even to stubbornness in this matter of flavours: witness the universal disapproval of the first Pharmacopœial compound liquorice powder and the preference for the old-fashioned German "Brust pulver."

Is the almost universal acceptance of light carbonate of magnesia for "magnesia" an analogous case? We think not. This is rather the perpetuation of an old pharmaceutical custom. Although calcined magnesia has always been "magnesia," half a century before its difference from lime was discovered carbonate of magnesia was known as "magnesia alba" or "white magnesia." There is no direct evidence that this name has travelled down from the beginning of the eighteenth century to the end of the nineteenth, but we may fairly suppose that it has, and that this is the reason why so many pharmacists continue to sell it as magnesia. It seems, however, that the recognition of the superiority of calcined magnesia is not a thing of yesterday. About fifty years ago Christison wrote: "As a laxative magnesia is now in most extensive use. . . . It is thought peculiarly serviceable in the instance of children." Of carbonate of magnesia he says: "It is less active, since rather more than one-half of it consists of carbonic acid and water." Apparently Scotch custom had been formed in favour of calcined magnesia before Christison's day, but we can readily conceive that his decided opinion would have convinced any waverers, since he exercised a more powerful influence on pharmacy in Scotland than any physician has ever done in other countries. We might advance several reasons for urging a departure from the general custom of supplying the light carbonate, but the best of all is the therapeutic superiority of the calcined. Its identity with modern nomenclature is also an important consideration.

It is good to have a reverential regard for the customs of the trade; but it must not be forgotten that pharmacy and medicine are progressive, and have made advances and improvements during the last fifty years, which it is desirable to take the fullest advantage of. In some instances advanced pharmacists, having adopted modern ideas, have helped to disturb the uniformity of practice which exists generally. The result is regrettable, but we may hope that with educational progress the desire for uniformity in trade practice will become more pronounced.

Year-book of Pharmacy. We received the 1888 volume of this useful reference-book on December 22, so that the Publishing Committee have been able to accede to the wish which we expressed when noticing the last volume (Jan. 7, 1888), that the book might be "in the hands of all the members before Christmas." Year by year the committee have been making progress in this direction, and we trust that they will always succeed in publishing the volume in the year to which it refers. The present

volume is smaller than the last one by 126 pages, the abstracts of chemical subjects occupying 15 pages less than last year, materia medica and pharmacy 52 pages less, and notes and formulæ 9 pages less. We do not, however, find that there has been a corresponding decrease in the value of the abstracts; they are apparently much more condensed than hitherto, and certainly of greater pharmaceutical interest. The introductory matter by the editor, Mr. Siebold, is a graphic and interesting account of the progress of pharmacy and allied sciences during the period which the book covers. The Unofficial Formulary is included in the volume, as well as a full report of the proceedings of the Conference at Bath. On the whole the Year-book for 1888 is quite up to the standard of its predecessors and superior to them in several respects.

* *

Tasteless Cascara Extract. Mr. E. G. Eberhardt gives (*Pharm. Era*) his opinion regarding the tasteless extract of cascara sagrada made according to Mr. R. Wright's formula. He made some, and of the product fluid-drachm doses were given to eight individuals, resulting in three instances in a slightly aperient action after the lapse of twelve hours or more, while in the others no effect was observed. Mr. Eberhardt proceeds to say that a more active preparation, having, perhaps, a tinge of bitter, but otherwise not unlike Mr. Wright's preparation, can be made as follows:—

Cascara bark in No. 40 powd.	..	..	1 lb. av.
Litharge	..	..	3 oz. av.

Mix and moisten well with sufficient water. Allow to macerate for twenty-four hours, pack in a percolator, and pour on, in portions, a quantity of rectified spirit, equal to that of the water used. Finish the percolation with proof spirit, reserving 15½ fl. oz., and evaporate the remainder to an extract, which dissolve in the reserve. The percolate is free from lead, and fluid-drachm doses produce a mild laxative effect devoid of the disagreeable symptoms so often accompanying the action of cascara.

* *

Failures in 1888. According to *Kemp's Mercantile Gazette* the total number of bankruptcies gazetted in 1888 in the United Kingdom was 6,096; in 1887 the number reached was 6,265. Although the total thus marks a decline, we regret to observe that the 1888 record of chemists and druggists compares badly with that of 1887. In the latter year there were 59 bankrupts among them; this year there are 87. The deeds of arrangement, which are officially recorded this year for the first time, number for the United Kingdom 3,667. To this total chemists and druggists contribute 40. That makes 127 chemists and druggists who have failed during the year, a proportion of at least one per hundred of those in business, taking into account Ireland as well as Great Britain, and illegitimate druggists as well as legitimate ones.

SOME STRANGE WATERS must pass through the hands of Mr. W. E. Crow, Government analyst at Hong Kong. In 1887 he examined 328 samples derived from wells and springs, and placed 233, or 71 per cent., of them in the category of "waters that are evidently much polluted."

CURE OF CORNS WITH CARBOLIC ACID. — Gubler (*Comm. Thérap. du Codex*) states that carbolic acid is a much more powerful escharotic than creosote, and that, in a concentrated state, it has the effect of tanning and corroding the skin. Dr. Salemi, of Nice, has taken advantage of this property for the purpose of curing a corn which several other remedies had failed to remove. He gives the following directions:—After bathing the feet in soapy water, dry the affected part. Melt the carbolic crystals by a gentle heat, and apply a thickish layer over the softened surface of the corn, taking care not to touch the surrounding sound flesh. After a few minutes apply to the layer of acid a piece of wadding or blotting-paper to absorb the excess of the acid. Before applying the acid surround the corn with a stout layer of soft collodion. Repeated at intervals of three or four days, this simple remedy is stated to effect a complete cure.

TINCTURES.

By F. W. FLETCHER, F.C.S.

I.

(INTRODUCTORY.)

DURING the past eighteen months circumstances have led me to make a somewhat close examination of the Pharmacopœia Tinctures, and it is proposed to embody in this and subsequent papers such results of the investigation as are likely to be of more or less permanent interest.

At first sight it seems remarkable that a class of preparations important commercially, as well as therapeutically, should be subject to none of the usual "characters and tests." This, however, ceases to be a matter of astonishment when we consider the elastic character of the official directions for preparing tinctures. These afford a captivating example of the happy-go-lucky vein in which Pharmacopœia processes appear to be conceived. *

The old method of simple maceration, and straining without pressure, retained in the German Pharmacopœia and the French Codex, had this point in its favour that it did not affect to be precise. It was akin to the artless contrivance which is still exemplified in the primeval process of infusion. But the authorities responsible for the British Pharmacopœia rose to the occasion sufficiently to recognise that tinctures were not unworthy of being brought to some sort of common standard. The old Adam of maceration could not be altogether renounced, but the new gospel of percolation must be respected, and so the two incompatibles were united by — *pressure*. Here is the heel of Achilles. "Subject the contents of the percolator to pressure, filter the product, mix the liquids, and add sufficient proof spirit to make one pint." In the face of an unknown quantity of pressure, it is small wonder that Pharmacopœia compilers should shrink from the task of formulating for tinctures any characters or tests which, in the words of the preface, "can be referred to with advantage."

Notwithstanding this, it is undeniably a matter of some therapeutical importance that the amount of active ingredient in any given tincture should be fairly constant; and from a commercial point of view, it is equally necessary that there should be a recognised standard of alcoholic strength, to which tinctures professing to be of the official type should correspond. A criterion of this kind becomes indeed absolutely indispensable now that the Inland Revenue Department has given greater facilities for the shipment of tinctures on drawback, as, otherwise, there can be no basis on which to claim repayment of duty.

It is scarcely necessary to point out that the alcoholic value of a tincture does not by any means correspond to that of the spirit used in making it. A pint of tincture of cinchona, for example, will not be equivalent to a pint of proof spirit, but to 20 oz. of proof spirit, *minus* the moisture and extractive matter contained in 4 oz. of cinchona bark, which, as a matter of fact, amount to within a fraction of 10 per cent. of the volume of the tincture. So, again, 100 fluid oz. of tinct. benzoin. co. will represent not 100 fluid oz. of rectified spirit, but only about 88 fluid oz., the balance being the soluble portion of the benzoin and other ingredients.

Now in the case of tinctures made by the favourite official triple alliance process of maceration, percolation, and pressure, it is obvious that the percentage of solid matter, and therefore of alcohol, will be directly dependent upon the

quantity of tincture left in the pressed marc. This again will depend (a) upon the nature of the material, and (b) upon the extent of the pressure. Bulky material of a spongy nature, such as orange peel or hops, will absorb a large quantity of menstruum; less absorbent substances, such as myrrh or cinnamon, comparatively little. And here it may be useful to consider a little carefully what is actually effected by the *tria juncta in uno* of the official process.

The business of maceration being completed, we are directed to "transfer to a percolator, and when the fluid ceases to pass," to "continue the percolation." It is by no means an easy matter to continue a process which has not been commenced, for to describe the draining away of the macerating liquid as "percolation" is about equivalent to saying that the smell of roast mutton constitutes a good dinner.

If, after maceration, the solid portion were separated, packed in a percolator, and the macerating liquid then carefully poured upon the surface, we should be adopting true percolation and not its counterfeit. As it is, only one-fourth of the available solvent is used to advantage, the remainder being either unsaturated or wasted. For now comes the most extraordinary part of this most extraordinary process. Percolation having just commenced, and the material having comfortably settled down into the most favourable condition for exhaustion by displacement, the percolator is to be emptied of its contents, and the latter subjected to the vague operation of pressure! It is like the famous Duke of York, who,

With twice ten thousand men,
First he marched them up the hill,
And then he marched them down again.

Want of uniformity in the specific gravity, colour, and therapeutical activity of tinctures is a complaint not heard now for the first time. Is this surprising when the volume of tincture left in the marc is in direct ratio to the quantity of material operated upon? The pharmacist who delights to be his own manufacturer, and works on Pharmacopœia quantities, will lose on an average about 20 per cent. of tincture; or, if he has a large demand, and can operate upon pounds instead of ounces of material, may with the help of a screw-press, reduce the loss to 10 per cent.; whilst the wholesale maker, working with hundredweights instead of pounds, and using hydraulic pressure, will succeed in recovering nearly the whole of his tincture from the marc, the result being that his product is the richest and most uniform in composition, and most nearly represents what the official process, taken at its best, is capable of yielding. This fact may be commended to the notice of those pharmaceutical purists whose *métier* it is to sneer at "factory-made" preparations.

Why the compilers of the Pharmacopœia, having first accepted the principle of percolation, should immediately proceed to stultify it by the practice of pressure, is a riddle which would puzzle the head of Oedipus. The answer does not lie in any theory of economy, for one of the most notable characteristics of a British Pharmacopœia is its lofty disregard of the pecuniary value of duty-paid spirit. The present edition teems with illustrations of this idiosyncrasy, but let the methods given for preparing extracts suffice as examples.

Could anything be so superlatively slipshod as the directions for dealing with the spirit used in these processes? In six of them, viz. belladonna, cascara, gelsemium, jaborandi, rhamnus frangula, and rhubarb, it is to be entirely wasted, or, to use the official euphemism, "dissipated." In five others, viz. calumba, colocynth, hop, jalap, and nux vomica, it is to be recovered by distillation; and in four more, viz. Indian hemp, mezereon, calabar bean, and stramonium, "the greater

* The United States Pharmacopœia is a notable exception. That, in spite of such an admirable model, our own Pharmacopœia should be what it is intensifies the mystery of its existence.

part" of it is to be distilled. To a non-compiling mind it would seem that the two pints of rectified spirit used to exhaust a pound of belladonna root are as worthy of survival as the pint and a half used to soak a pound of hops. But such an assumption would be a serious miscalculation of the mental possibilities of an official compiler, for in the first instance the spirit is lost, in the second it is recovered. The authors of these processes appear to cherish a special spite against percolation, for it is worthy of note that when this method is employed the spirit is always evaporated into space; whilst on the other hand, when pressure is used, the spirit is always saved by distillation. Possibly it may have been discovered that a percolator exercises a sort of catalytic action on alcohol, and that the latter mysteriously disappears during the process of percolation.

Before entering upon the examination of tinctures, it is necessary to prepare a series of trustworthy standards, which shall represent the Pharmacopœia products at their maximum strength.

In the succeeding article the methods of obtaining these standards will be described, and for convenience sake the general subject will be dealt with as follows:—

1. Preparation of standards.
2. Specific gravities.
3. Determination of alcohol.
4. Estimation of soluble matter.
5. Separation of alkaloids.
6. Detection of methylated spirit in tinctures and kindred compounds.
7. Suggested improvements in existing processes for the preparation of tinctures.



AND Literary Notes.

Recent Materia Medica. Third Edition. By F. Harwood Lescher, F.C.S., &c. London: J. & A. Churchill.

IT is four years since the last edition of this useful work was published, and in the interval many new remedies have become established favourites, and the uses of others have been extended or modified. Consequently the author has found it necessary to make many alterations in the old text, and he has introduced descriptive accounts of nearly a hundred new articles, comprising also latest synthetic products as well as new drugs. The plan of the book has been described in previous reviews, but we may recall the fact that the characteristics of the remedies are briefly and clearly described in all cases, and therapeutic notes are given which are the crisp expression of the opinions of the ablest physicians. To these are added useful chemical, pharmaceutical, and posological facts which help to make the book even more useful to the pharmacist than it undoubtedly is to the physician.

Proceedings of the Tenth Annual Meeting of the New York State Pharmaceutical Association.

WHAT we said recently regarding the Pennsylvania Association is equally applicable to this one. The New York pharmacists met in the Prospect Park Hotel, Catskill, on June 19-21, and what they saw, said, and did are reported by Miss Sarah A. Moore, and presented in a handsome volume of 232 pages. Amongst the interesting things in this is a correspondence regarding "colourless hydrastis," a popular "factory-made" article in the States at present. The reading of this correspondence led to a little bit of a wrangle, which was none the pleasanter from the fact no names were mentioned, although the receivers of the hard hits were perfectly well known. This sort of thing is better

omitted at association meetings. The report of the committee on adulteration is a valuable document. Amongst the articles reported on is cocaine hydrochlorate. Six samples were tested by Giesel's test, the hydrochlorate being added to 5 cc. of distilled water containing 1 drop of 1 per cent. potassium permanganate solution and 10 drops of 10 per cent. sulphuric acid, the results being as follows:—

A	amorphous,	7	milligrammes used for decolorisation.
B	"	7	" " " "
C	crystalline,	257	" " " "
D	"	258	" " " "
E	"	200	" " " "
F	"	1,000	" " " "

F was German, the rest American manufacture, but not all of the latter makes are represented. The results show how much even crystalline cocaine hydrochlorate varies. We may repeat that it is the bulky crystals which are to be looked upon with suspicion.

[[We have received "A Brief Handbook to Rugby and its Schools" from the publisher, Mr. George E Over, Rugby. It contains a photograph of the school, and historic and other details. Price 6d.

Chemical Laboratory Labels. Compiled by W. H. Symons, F.R.M.S., F.I.C., &c. 1s. per part, or 2s. 6d. per set.

THIS admirable collection of labels is published in three parts, the first containing 160 labels for common reagents and 130 additional slips, together with sheets of formulæ and "molecular weights." This is intended to supply the wants of the average student. The second comprises about 400 labels, including special reagents and other substances required by the practising chemist. The third contains 160 large labels suitable for stock bottles, volumetric solutions, &c. As bound in one lot the labels form a very substantial book. The labels for ordinary reagents are $1\frac{1}{2}$ in. long and $1\frac{1}{8}$ in. deep, and the type is clearly distinctive and uniform throughout. Obviously the whole of the label, when placed on a reagent bottle, is seen at once—an advantage which most will appreciate. Owing to the uniformity of the type the halves of two labels may be used for labelling unusual compounds. The tables in the first part are very useful, and we observe that the symbols of elementary bodies, with their atomic weights, are "arranged according to Newland's periodic law." The labels may be obtained from Idris & Co., Kentish Town, N.W., or Henry Kimpton, 82 High Holborn, W.C.

"THE ART OF DISPENSING."

"THIS book has for its object the instruction of the young pharmacist in all that pertains to dispensing. English dispensing is considerably more difficult than German. . . . For that reason the book must have been extremely acceptable to English pharmacists. . . . and will be just as acceptable and as handy to many of ourselves, especially those situated in watering-places, where English prescriptions have frequently to be dispensed."—*Hundschau* (Prague).

"THIS handy and very practically-arranged handbook will doubtless prove itself of great service to many Continental pharmacists who possess a knowledge of English. In clear and concisely-written chapters all the forms of medicine at present used in England are described, and their preparation criticised in a businesslike manner. . . . The authors have created a true compendium of pharmaceutical dispensing, which will not only be useful to medical and pharmaceutical students, but will also be found acceptable as a reference book to practical pharmacists.—*Le Progrès* (Geneva).

THE *Hospital* of December 15 prints an article on "Chemists and their work," in which the difficulties which chemists have to contend against at the dispensing-counter are gone into with some fulness, the information being derived from "The Art of Dispensing," which the *Hospital* strongly recommends.

Trade Report.

Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., January 3.

THE Mining Lane markets are gradually waking up again to business, though only two articles, viz., shellac and quicksilver, have been the subject of more or less abnormal change. The latter has considerably advanced in price, carrying with it all mercurials. Glycerine is also quoted firmer in some quarters, and oxalic acid is higher in price, while morphia remains firm. Salicylic acid, cream of tartar, and quinine are easier. Spermaceti is also tending lower, but saffron, copaiba balsam, star-anise oil, Calabar beans, cascara sagrada, ipecacuanha, and senega are either very firm or dearer. Cochineal has sold at a slight decline. Shellac has been the object of active speculation, and closes several shillings dearer. Block gambier is also higher, and the tea market has opened firm. Black Singapore and white Singapore pepper are slightly easier.

THE SPIRIT DRAWBACK.—Messrs. Fletcher, Fletcher & Stevenson write as follows:—"Referring to the remarks in your Trade Report of December 29, we may state that we are informed by the Board of Inland Revenue that they are not prepared at present to entertain any proposal for the extension of the list of medical preparations mentioned in the General Order." As you are aware, permission was given under a previous Order to ship medicinal spirits on drawback in Winchester quarts, and for some time past we have availed ourselves of this concession—being, we believe, the first firm in this country to export English tinctures. We may add that the time usually occupied in testing samples and completing the official business before drawback is obtained is from two to three months; though, of course, if there should be a rush of business at Somerset House under the new Order, this period may be indefinitely prolonged. It will be rather a serious matter for shippers if any dispute should arise on their claim after the goods have been cleared on the other side."

ONE OF THE GERMAN LINGUISTS.—A firm of shipping agents in Bremen have sent us a circular in which they state: "We beg herewith to inform you, that with the beginning of January 1889 there will be opened a new direct regular line of steamers, between our port and those of the British India: Bombay and Calcutta. The steamers are intended to be despatched previously once a month and as the freight-rates are adapted to those of the concurring lines, during the forwarding shall be a very fast one, by avoiding the run of any intermediate port, we take the liberty to invite you, to ship in future your goods by this new line and at the meantime we beg to offer you our best services, for the forwarding and shipping of your goods. With much pleasure, we are very willing to give any wished informations, as to freight or so and reitering the expression of our esteem, we are waiting your kind good news."

COCAINE-MAKING IN CEYLON.—It would seem that there is some idea of commencing the manufacture of cocaine in Colombo, Ceylon. At present the matter seems quite in embryo, but Ceylon planters who are in a position to supply leaves are asked to communicate with a gentleman in Colombo, whose object it is to extract the alkaloid. A sample of the parcel of Java leaves of fine appearance, to which we referred some time ago, yielded, when analysed by us, only 0.4 per cent. of the alkaloid.

EXTENSION OF STEAMSHIP COMMUNICATION WITH AFRICA.—The French Government is about to ask the

Chambers for an annual grant of 700,000 francs towards the establishment of a monthly mail service by steamer from Marseilles, Havre, or Rouen, to the French colonies on the Senegal and elsewhere in Western Africa. The subsidised company would have to bind itself to keep up the contract for fifteen years, and might eventually extend its service to Cape Town. It is hoped that much of the African produce now consigned to Liverpool and Hamburg would, by the new route, be drawn to French trade centres. The Portuguese Government have also granted a subvention to their Royal Mail line for the purpose of establishing steamship communication between the Portuguese possessions at Louanda on the West, and Mozambique on the South-east Coast of Africa, *via* the Cape.

THE chemical markets in the North of England, writes our correspondent, have been closed since last week, and the business which is being transacted at present is of a purely retail character at the previous quotations.

FREIGHT "RIGGING" IN BOMBAY.—It is said that in Bombay there are at present several gangs of native speculators, who book ahead thousands and thousands of tons of cargo by "any first-class steamer" to any port in the United Kingdom or on the Continent or Mediterranean, thus preventing *bona-fide* owners from either fixing their vessels or berthing them. They even come in the way of *bona-fide* brokers, inasmuch as they send their own brokers to collect all the available cargo at 6d. or 9d. less than the other brokers. Unless merchants stop taking orders by "any first-class steamer," and owners put some more confidence in their agents and book some cargo before the steamer leaves for the East from *bona-fide* shippers, things are not likely to improve.

ACID (CITRIC) remains dull and lifeless at 1s. 5½d. to 1s. 5¾d. per lb. spot, and a trifle over those figures for forward. Juice dull. The following table shows the imports of concentrated lemon and bergamot juice from Sicily into London and Liverpool during the last five years:—

	1884	1885	1886	1887	1888
	Pipes	Pipes	Pipes	Pipes	Pipes
First quarter ..	1,376	1,597	492	1,698	1,914
Second " ..	1,620	925	370	579	1,079
Third " ..	513	412	443	923	518
Fourth " ..	585	316	513	271	332
	4,094	3,250	1,818	3,476	3,843

A pipe of juice yields about 3 cwt. of citric acid. By far the greater part of the imports come to London.

ACID (SALICYLIC).—Lower prices are quoted since the commencement of the year, 5s. 2d. per lb. being the quotation for the 1-cwt. lots, and 5s. 4d. per lb. for 28-lb. lots in 1-lb. bottles.

ACIDS (VARIOUS).—*Tartaric* dull at 1s. 3¼d. to 1s. 3¾d. per lb. according to brand. We hear it said that business has been done in foreign on the spot at the former price. *Oxalic* has been advanced ½d. per lb. and is now held at 4½d. per lb. *Hydrochloric* B.P., 22s. 6d. per cwt. *Nitric*, 1:420. B.P., 38s. per cwt.; ditto commercial, 1:360, 32s. per cwt. *Pyrogallie* (English), 1s. 9d. per oz.; pure *Sulphuric* B.P., 2½d. per lb.

ANISE.—*Russian* seed is steady, and the last prices paid, viz. 20s. to 22s., are well maintained. In *Chilian* seed a fair business is doing in Liverpool at 19s. per cwt.

BALSAM COPAIBA.—For bright *Maranham* balsam 2s. 5d. per lb. has been paid in Liverpool, second hands, and there is now very little left in stock at that port.

BORAX.—Further small transactions in German brands were made at Liverpool late last week at the very low, though slightly improved, price of 28s. per cwt. net cash. The English makers have made no change in their quotations of 30s. to 31s., but second-hand holders offer below those rates.

CALABAR BEANS. The small supply which was offering at Liverpool is said to have been cleared out of the market at 6¼d. per lb.

CAMPHOR.—There is still no alteration in the price, refined (bells) being still quoted at 1s. 4d. per lb. *Crude* is without business so far as we can hear, but there are still offers from Japan at 85s. "c.i.f." terms for arrival. Mr. S. Cocking, of Yokohama, advises planters in the hill districts of Ceylon to turn their attention to the cultivation of the camphor tree, which, he says, is getting scarce and scarcer every year in the warmest parts of Japan, where it principally grows.

CARDAMOMS.—From the beginning of the season up to December 6 only 28,970 lbs. had been shipped from Ceylon, against 52,440 lbs. in 1887, and 38,757 lbs. in 1886 during the corresponding periods.

CASCARA SAGRADA.—New York cablegrams quote an advance on that market to 2s. per lb. "c.i.f." terms, and state that there is hardly any stock left (see also our correspondent's letter). But there are still sellers on this market at the recent quotation. A lot of 1,000 lbs., recently received from Portland, Oregon, on the New York market, which was of very inferior quality, but sold at about 33c. Mail advices from San Francisco report that there is absolutely nothing to be had along the Pacific coast.

CASCARILLA.—At present 213 packages, mostly of recent import, are declared for public auction next Thursday, and lower prices are therefore not unlikely to rule.

CINCHONA.—The shipments from Ceylon in the period between October 1 and December 6 have been:—In 1888, 2,377,239 lbs.; in 1887, 1,506,606 lbs.; in 1886, 2,750,858 lbs. The first London public sales, to be held on January 15, are likely to be very heavy, though at present only 972 packages Ceylon, 319 Java, 50 East Indian, and 3 Fiji bark have been declared.

COCAINE.—The price for some of the German brands referred to in our last report was the equivalent of the German maker's price net at the works, the cost of carriage to London not being added, and no account being taken of the usual trade discount allowed here.

COCHINEAL.—The slight improvement which was reported to have taken place some time ago has not been a durable one, for last week cochineal was sold at the unprecedentedly low price of 11d. per lb. for silver, and 10d. per lb. for rosy black *Teneriffe*.

CREAM OF TARTAR.—Business is of a very limited character at present: first white is offering at 104s. 6d. per cwt., or slightly below last week's quotation.

CUMIN SEED.—*Malla* steadily held at 37s. to 40s. per cwt.

FENUGREEK SEED.—The demand has been rather slack.

GALLS.—Subsequent to the transaction reported in our last issue of 60 cases *China* at 67s. 6d., holders refused to go on at that figure, and held out for 70s. per cwt. Since that time no further spot business has transpired. Cable advices received to-day from Shanghai report slightly easier prices, viz., 64s. 9d. c.i.f. steamer shipment. A few days ago the quotations were 64s. 6d. c.i.f. Hamburg, 65s. 6d. c.i.f. New York.

GAMBIER.—This market has been firm, with good inquiry, and a fairly large business in *Block* at an advance of about 3d. for forward delivery. Spot has been sold at 26s. 9d.; October-November, 26s. 9d. to 27s.; November-December, 25s. 6d. to 25s. 9d.; December-January, 25s. 1½d. to 25s. 3d.; and December-January (Liverpool) at 25s. 6d. to 25s. 7½d. per cwt.

GLYCERINE.—There is a movement towards an advance, and several makers report much greater firmness, some holding S.G. double-distilled 1·260 at 70l., and others not quoting at all, but at least one of the foreign agents has not followed his confrères yet, and declares himself willing to sell at 65l. to 66l.

GUM ARABIC.—We hear from Liverpool that there is no change in *Egyptian* descriptions, and the transactions are of an insignificant nature. The demand for *Brazilian* shows an absence of improvement; good bold red sells slowly at 60s. per cwt., but stocks have been largely augmented by late arrivals, and easier figures would be entertained for quantity. *Senegal* and *East India* quite neglected, and there is no alteration to note in quotations.

GUM ASAFETIDA.—The coming drug sales will include 42 cases.

HONEY.—The market remains exceedingly firm, and at the close of the year the Liverpool stock amounted to 2,140 barrels *Chilian* and 350 cases *Californian*.

IODINE.—Prices are unaltered. *Crude*, 12s. 9d. per lb.; *Re-sublimed*, 13s. 3d. to 13s. 6d. per lb., larger quantities perhaps a shade less; *Polassium iodide*, 11s. 6d. to 11s. 9d. per lb.; *Iodoform*, crystal or powder, 15s. 9d. per lb. The production of iodine in Chili is given as follows:—1880, 83,863 kilos.; 1882, 263,981 kilos.; 1884, 218,194 kilos.; 1885, 256,796 kilos.

IPECACUANHA in demand. For a parcel of rather ordinary thin root 7s. 3d. per lb. is said to have been paid privately. We have not heard of any fresh arrivals lately, and up to the present time none is announced for sale at next week's drug auctions.

JABORANDI LEAVES.—The inquiry still continues, but holders' views are too high to admit of much business at present, 4¾d. to 5d. per lb. being asked.

MERCURIALS have been advanced 2d. per lb. all round. The makers' lists issued at the beginning of the month quoted: *Calomel*, 3s. 3d.; *Corrosive sublimate*, 2s. 7d.; *Red precipitate*, 3s. 6d.; *White ditto*, 3s. 5d.; *Blue pill*, 2s.; *Ointment*, 2s.; and *Vermilion*, 2s. 10d. per lb.; but since the quicksilver speculation set in 3s. 5d. has become the nominal basis for calomel.

MORPHIA.—The makers still hold firmly at 5s. per oz. A parcel of 650 oz. hydrochlorate (Macfarlane's brand) is advertised for auction on January 10.

NUX VOMICA.—According to latest reports (December 11) from Calcutta, there is nothing doing there in nux vomica, though prices are nominally easier.

OIL (CASTOR).—The Liverpool market remains rather quiet, and very slightly lower values have been accepted for *Madras* oil to arrive. The price for good *Calcutta* seconds is 3¼d. per lb.

OILS (ESSENTIAL) are mostly dull and very quiet. China cables report *Star-anise* oil rising, and quote 6s. 2d. c.i.f. terms, steamer shipment; while *Cassia* oil is quoted at 3s. 1½d. c.i.f. *Almond* oil is quoted at 25s.; *Clove* (English) at 5s. 6d., but foreign offers cheaper; *Pimento* at 15s.; *Yellow Sandalwood* (English) 17s. per lb. American *Peppermint* (H.G.H.) is quoted at 14s. per lb.

QUICKSILVER.—This article has, with shellac, shared the honours of the week, the second-hand price having advanced fully 16s. per bottle since our last report. At the close of last week 7l. 17s. 6d. to 7l. 18s. would still buy; but on Monday the market became excited, and since then a heavy speculative business is reported at prices rising from 8l. to 8l. 14s., though to-night the feeling is a shade easier. The principal importers have not changed their nominal price of 9l. 10s., which seems to indicate that the *bona-fide* demand for consumption is not large.

QUININE.—Last week the market closed very weak and without business, at 1s. 3½d. to 1s. 3¼d. per oz. nominally for German bulk in second hands. This week some holders have been pressing for sale rather anxiously, and yesterday the agents for the *Brunswick* factory are said to have sold 10,000 oz., Feb.-March delivery, at 1s. 3d. per oz. To-day there are sellers, but no buyers, at 1s. 3d. per oz. spot. The other makers are holding aloof.

SAFFRON is reported fully 2s. per lb. dearer, the stock left in Valencia being said to be very small indeed.

SENEGA.—There is said to be a brisk inquiry on the spot, 2s. 9d. per lb. being given as the quotation.

SHELLAC has received a very large share of attention this week, especially since the publication of the favourable London-stock figures. To-day an agitated speculative movement has set in and prices close from 4s. to 5s. dearer all round for the week, but the very rapidity of the present advancing movement appears to justify doubt as to the genuineness of its character. The total sales reported since last week amount to about 15,000 chests. *Fine orange* VSO has sold at 75s. to 80s. on the spot; *Second orange*, TN quality, at from 62s. up to 66s. for good; for delivery

January 63s., rising to 67s.; February 62s., rising to 66s.; March 66s., rising to 72s.; April 66s., rising to 70s.; for shipment December-February 70s. c.i.f. is said to have been refused. *Garnet lac* has been largely dealt in, AC on the spot 52s., advancing to 56s.; block 52s. 6d.; January delivery 57s. to 57s. 6d.; February 54s. 6d.; March 54s. 6d. to 55s. *Button* sold at 75s., advancing to 80s. for firsts, 71s. up to 75s. for seconds, 63s. to 65s. for thirds. The shipments from Calcutta to the United Kingdom during December were 3,300 cwt. against 14,000 cwt. last year. The steamers *Belgravia* and *Glennmorren*, which left Calcutta on December 3 and 6 respectively for New York direct, *via* Suez Canal, take a total of 3,375 cwt., consisting entirely of Orange, the bulk standard marks, including about 500 chests DC, BSLS and ASSL, and 600 chests VSO. The total quantity now afloat to the United States is 3,950 cwt. against 7,840 cwt. last year. The Calcutta mail, dated December 11, brings reports that there is a good demand for shellac with a strong market and little offering, while for delivery sellers refuse to name a price. The future looks very strong. The only business done has been in native marks.

SODA SALTS.—*1st* quiet, at 1½d. per degree landed here, and 1d. on the Tyne. *Crystals* are held at 50s. to 51s. ex-ship. London, and 42s. to 42s. 6d. on the Tyne. It is said that the agreement between the Tyne manufacturers of soda crystals, which came into operation on Tuesday, is to the effect that all works whose average production up till now has been 160 tons per week will give up manufacturing altogether for the next two years, while the smaller works will reduce their turnout considerably. A Northumberland manufacturer has also agreed to stop making soda crystals for another year. *Bicarbonate* in pretty good demand, at 5l. 2s. 6d. to 5l. 5s. ex London warehouse. *Caustic soda* closed firmer last week; cream, 60-per-cent., at 5l. 18s. 9d. to 6l. 2s. 6d. on the spot, and white, 60 to 70 per cent., at from 6l. to 7l. 10s. on the spot. *Nitrate* quiet, but firm, at 11l. 2s. 6d. to 11l. 5s. on the spot. *Rochelle salts* (tartrate of soda) 104s. to 115s. per cwt.

SPERMACEI—American refined may now be had at 1s. 2½d. to 1s. 3d. per lb.

SPICES have been dull in the absence of public sales, and we only hear of business in *Black Pepper*: Singapore, at slightly falling rates on the spot, 7½d.; February-March, 7½d.; December-January, 7½d. to 7¾d.; and January-March, 7¾d. *White Pepper*: Penang, January-February steamer shipment at 10¼d., subsequently declining to 10½d. *Cinnamon*, fair Ceylon seconds, spot, 8d. per lb.

TEA.—The *China* market has opened firmly after the holidays, most dealers having sold many of the cheap teas they had been able to buy at the close of last year on the market or in their own trade, and the small public sales of the week have passed with a steady tone. Fair common new Kaisow, Saryunc, and Soomoo is selling from 4¾d. to 5½d.; good leaf Sueykut fetched 6¾d. in Wednesday's sale, and useful Panyongs from 7d. to 9d. show first-rate value. Pecco Congous, however, selling 8d. to 9d. before the holidays cannot now be matched. Monings under 8d. are slightly firmer for all except common Shantams at 4¼d. Scented capers and S. O. Pekoes are at the moment in small supply, with no alteration to note; but Oolongs are offered freely. *Assams* and *Ceylons* opened firmly for all grades, fair broken tea selling 7d. to 7½d.; Souchong 7¼d. to 7¾d. Pekoes from 10d. to 1s. show the anticipated advance from the very low prices of a fortnight ago, but in the face of heavy sales to come on shortly this advance may be only temporary. Low-priced Ceylons are selling 8½d. to 9½d. for Pekoe Souchong and lower grades of Pekoe, but teas from 10d. to 1s. are unaltered.

VANILLA.—There are at present 120 tins advertised for sale next Thursday. Advices from Madagascar state that in the Mahanoro district the plants have commenced flowering very early this year, and that to all appearance the crop this season will be twice as large as last year. Mauritius letters speak of a good demand for the new crop in that island. The estimate for the present crop ranges from 31,000 lbs. to 36,000 lbs.

THE AMERICAN MARKETS.

NEW YORK, December 22, 1888.

TO say that this market is dull is to put the true condition of affairs in a very mild form. Business in a quantity way is about at a stand, and a change for the better is not probable until the new year has turned and plans for the conduct of a fresh campaign are definitely decided upon.

ACID (TARTARIC) in crystals has been reduced to 41c. to 43c., as to quantity; powdered, 1c. higher.

BALSAMS are substantially in the same position as at the close of last week. There have been no important fresh arrivals of either *Copaiba* or *Tolu*, and values consequently have shown no special alteration. *Canada* and *Peru* are held nominally as before.

BORAX has continued steady for spot stock, but regarding the future some uncertainty is yet manifested. The uncertainty arises from the settlement of the affairs of W. T. Coleman & Co., and the probable influence upon the Californian "pool."

CAMPHOR.—*Refined* has continued slow of sale. Manufacturers insist on 30c. for barrels, but from second hands value can be shaded by ¼c. to 1c.

CASCARA SAGRADA has continued in good demand, but the paucity of stocks, and extreme prices entertained, have combined to limit business. Some few small sales have been made at 40c., but 42c. is now required. The total stock is estimated to not exceed 5,000 lbs.

CHLORATE OF POTASH.—Crystals continue dull, but in the absence of any considerable stock the price is maintained at 15c. for quantities.

CIVET.—The price has been reduced to \$3.75.

COCOA BUTTER is disturbed somewhat by the offers of stock to arrive from London at 34c.; spot goods in consequence have yielded to 35c. for Dutch A.

CREAM OF TARTAR.—A reduction in the price is anticipated for January 1, when first crystals will probably be 30c.

CUTTLE-FISH BONE.—*Trieste* has been forced to a lower level through local influences, the acceptable price to-day being 19c. from the principal holder.

ERGOT OF RYE has remained steady, but no considerable business has transpired.

GUM GUAIAACUM has declined, upon freer arrivals direct and from London, to 20c. to 25c., as to quality.

INSECT FLOWERS.—Cable advices concerning the true position of insect flowers in Trieste have been conflicting. One of the principal powder manufacturers has reduced the price to 40c. for best goods, and 35c. for stock from open flowers. Others in the trade have refused to follow this lead, stating that good reason for such action was lacking; but the former has shown his confidence in his advices cabled by contracting largely for future delivery upon this basis.

LYCOPodium.—The unfavourable crop reports from Russia and speculative operations of Hamburg merchants have forced the price down to 36c.

OILS (ESSENTIAL).—Numerous changes have occurred during the week under review. *Anise* is firmer; the stock is under strong control, and the inside price is \$1.60. *Mirbane*, English, is now held at 15½c. *Otto of Rose* has declined to \$4.50 for Holstein's, and \$4.75 for Ihmsen's. *Peppermint*: H. G. H. has ruled dull during the entire week. Exporters' ideas have been not to exceed \$3.07½, while upon the part of holders \$3.10 to \$3.15 is firmly required; business in consequence is at a stand. *Sassafras* is coming to hand more freely, and the price in consequence has declined to 65c. Sanderson's goods are all lower; *Bergamot* in coppers reduced to \$2.25; *Lemon*, \$1.50; and *Orange*, \$1.45.

OPIMUM.—Cable advices from Smyrna of a more active and advancing market have finally resulted in stimulating action here. Sales have been made of about 75 cases low-grade stock, at prices within the range of \$1.80 to \$1.90, but to-day \$1.95 is the lowest acceptable quotation for similar goods. For high test the market has also sympathised until

A GERMAN physician recommends salicylate of sodium, in doses of 10 grains, every half-hour, as an internal remedy for toothache.

now, when \$2.15 is demanded; but interest in this class of stock is lacking, as the inferior quality satisfies the requirements of the druggists.

QUININE has been in a "very bad way" during the week. The price has dropped to 30c. for foreign in large bulk, at which the current necessities of the trade have been supplied. The future of this article is not regarded with much favour, though, upon the present basis of cost, buyers are showing less hesitation to act. The German makers have expressed a willingness to book orders at 30c. for the first quarter of 1889, and the result has been that contracts, aggregating some 25,000 oz., have been closed at this figure.

SHELLAC has developed considerable activity. The trading has been largely between dealers who are unable to purchase as cheaply abroad, and consumers have also extended some attention. The transactions for the week include some 1,500 cases, principally TN quality, second *Orange*, the prices paid being upon the basis of 22c. for DC, 17½c. for VSO, and 13½c. for TN. Cable offerings from Calcutta are made very sparingly, and at prices which do not permit of any delay in the acceptance, manufacturers demanding a prompt acknowledgement.

THE DRUG MARKET IN 1888.

(From a Review by Messrs. Reynolds & Sellers,
Mincing Lane, E.C.)

ALOEES.—The low prices ruling throughout the previous three years have not influenced supplies during the past twelve months. All descriptions have been plentiful and in excess of requirements, the stock at the close being larger than we have ever known. *Barbadoes* and *Curaçao* have consisted principally of ordinary to very common qualities, which have been extremely difficult of sale except at continually declining prices, which could not leave much margin to the importers. *Socotrine*.—Fine quality has been scarce throughout the year, but fair qualities have been plentiful. *Hepatic*.—Skins have been in excess of requirements, and show a decline on opening rates, 75s. being accepted for dark quality in November. A made-up *Socotrine* in tin-lined cases (to represent the old-fashioned *Socotrine* in cases), and generally believed to be, and to all appearance being re-boiled *Curaçao* mixed with the soft *Zanzibar* in tins, has been placed on the market, and only appears to find a ready sale for shipment to the United States. *Cape*.—Lower quotations have been experienced than for many years past.

CASCARILLA BARK.—Although the high prices ruling last year have not been maintained, the supplies have not been at all excessive, and generally met a good market. Fine silvery quill has brought up to 41s., whilst good has found buyers at 32s. 6d. to 34s.; holders lately have been asking more money. Within the last few days fresh arrivals of over 200 packages have come to hand, which will be probably offered early in the new year.

CHAMOMILES.—Early in the spring a good inquiry existed for the first quality at 6l. 5s. to 6l. 10s., easing away as the summer approached in anticipation of the new crop, which commenced to be offered early in August at 70s., and then down to 65s. Before the month was out the price was advanced to 80s., consequent on the bad weather prevailing in Belgium, notwithstanding the "bear" sales, combined with reports of an "exceptionally large" crop, and predictions of much lower prices; fine flowers are now selling at 5l. 10s. to 5l. 15s., inferior in proportion. Brown qualities of old import remained almost unsaleable until September, when (similar to the autumn of 1882), owing to the bad hop harvest, an attempt was made to rish prices, but only resulted in a few shillings advance, with one or two parcels being cleared.

COCHINEAL.—The imports have been about the same as the previous year, but the deliveries are going from bad to worse; compared with last year they show a deficiency of more than 1,300 bags, and when compared with those of six years ago more than 3,200 bags. It is becoming almost a monopoly, and serious fluctuations are things of the past; beyond an improved demand during the summer months,

which enhanced values about ½d., quietness has reigned supreme. Fine qualities are always saleable at a price, which cannot be said of the inferior ones.

ERGOT OF RYE.—*Spanish* experienced a good demand at the commencement of the year, advancing to 2s. 3d., which, however, was not of long duration, rapidly giving way to 1s. 10d. before the end of January, and still on the downward track, until 1s. 5d. was accepted in April for good clean; 1d. advance on this price was paid later in the month, owing to an imagined scarcity combined with one or two orders for America, but, supplies exceeding the demand, the "tobogganing" again prevailed, until in November 10d. was accepted for fair quality rather wormy. Within the last month the States have again come to the rescue, and prices show a substantial rise, business having been done at 1s. 6d. for old, fine new as high as 2s. 3d. *Russian*.—In sympathy with the former, the fluctuations have been influenced accordingly: 2s. was paid in January, whilst the lowest was recorded during the summer months, when 5d. was accepted for ordinary wormy, part mouldy; the closing quotation for good fair quality is 1s. per lb.

GUM ARABIC.—Whilst good and fine qualities have maintained their prices, large quantities of all descriptions of inferior and low qualities have been periodically brought forward to public sale, and where pressed met the fate they deserved, viz. more or less slaughtered. All kinds of *East Indian* have been fully represented: *Ghatti* has come forward regardless of expense, also the *West Coast of Africa* has not been forgotten, hence our landings almost double those of last year, being 31,000 packages against 17,000. *Australian*.—Importations have not been excessive, and fine bold frosty quality has sold from 71s. to 75s., according to the demand, but lower quotations have ruled for the inferior descriptions, ordinary glassy now being worth about 45s. *Barbary*.—This season's crop of brown has been of a very dusty character, and realised about 5l. 10s.; several parcels of white have been imported, and have sold readily at 9l. to 9l. 5s., whilst superior picked, resembling Turkey, has fetched from 15l. to 17l. 10s. *Senegal*.—Only a few parcels have come forward, and found a ready sale at the high prices of last year, remaining steady all through; during March and April sales were made at 7l. for Galam, but below this figure the price has never descended, whilst an advance has frequently been paid, losing at 7l. 15s. to 8l. 5s. for Galam. *Bas de Fleuve*, none in stock. *Ghezirah* and *Talea*.—Stocks are almost exhausted, and from Cairo the same is reported, whilst the few parcels available are firmly held at prohibitive prices. *Turkey Sorts*.—We are still without supplies, and for the small quantity obtainable extreme prices have been paid, showing an advance for the year of 7l. per cwt. Opening in January at 13l. to 13l. 10s., holders raised their limits to 16l. the next month; during the summer 19l. was paid, which quotation has been advanced to 20l. *Picked*, in sympathy with the foregoing, has ruled accordingly; during June, 5 cases good Trieste grains—a disputed contract—were offered "without reserve," selling from 14l. 10s. to 15l. 10s. From the *Cape* we have been favoured with several importations of clean pale picked softish gum, which have always met a good market, selling from 7l. 10s. to 8l. 10s.; fine up to 11l. per cwt.

GUM BENJAMIN.—*Siam*.—The supplies have been on the most liberal scale throughout the year, whilst the sales have been effected with difficulty, importers resorting to the extreme measure of offering their parcels in public sale "without reserve," with one continual decline resulting, opening in January at 22l. to 23l. for good free almonds, and selling in December at 14l. *Sumatra* has likewise suffered a serious decline on opening rates. "Without reserve" has been the order of the day, and although since November prices have somewhat recovered, we close 30s. below January's rates. No first quality has come to hand. *Palembang*.—An innovation in the packing has been introduced in this description; instead of the cases containing one block the gum has been packed in blocks (in tins) of about 25 lbs each, about six tins in a case, which does not give much scope for false packing.

GUM ELEMI.—Supplies have not been at all plentiful, and with a steady demand for good to fine qualities prices have ruled higher than the previous year; fine white sold in March at 36s., and in April good quality at 31s., since when the price has gradually improved until 48s. was paid for two

cases early in December, but later in the month this quotation was not obtainable.

GUM MYRRH.—During the summer and autumn a recovery took place, and prices gradually hardened, when holders required 5*l.* 10*s.* for good quality, which, however, checked business; fresh arrivals have since come to hand. Good fair sorts are now obtainable at 5*l.* A few parcels of selected have been placed on the market at 7*l.* to 8*l.* extra fine at 9*l.* 10*s.* per cwt. Bdellium gum has been conspicuous by its absence.

GUM TRAGACANTH.—Since this article was transferred from the usual drug sales to catalogues consisting entirely of its own, very little business has been transacted publicly. The monopoly bring forward periodically to public sale large quantities, but invariably withdraw the greater portion, in some instances being unable to dispose of more than three per cent. of the total offered. We quote—Syrian, firsts 10*l.* to 11*l.*, seconds 9*l.* to 9*l.* 5*s.*, thirds 6*l.* to 7*l.* 10*s.*, pinky 90*s.* to 5*l.* 5*s.*, hog 60*s.* to 80*s.* per cwt.

HONEY.—All descriptions remained quiet during the spring, without much change in values, with the exception of *Jamaica*, which has always found a ready sale. *Californian* has been in demand in Liverpool since the turn of the year at continually advancing prices, fine quality recently having been sold at 55*s.*; the same market has monopolised the *Chilian*, firsts selling up to 45*s.* *New Zealand* qualities have brought higher prices than for some years past. A small parcel of fair white *English* is offering at 45*s.*

JALAP.—Notwithstanding the reports from Mexico that the low prices current throughout the previous few years would prohibit consignments, our importations have exceeded those of last year, which, however, have been counteracted by good deliveries consequent upon holders meeting buyers' ideas. In March a small parcel of good heavy root sold at 6½*d.*; also the same figure was paid in May, but has been since unobtainable, quotations ruling at 5*d.* to 5½*d.* for good Vera Cruz.

QUININE.—Sales and re-sales throughout the year have been on a larger magnitude than ever before recorded, the principal reason being that the article is now under the canopy of speculators. It would be superfluous to estimate the quantity which has changed hands; continual sales reported ranging from 1,000 to 200,000 oz. The opening price of 2*s.* advanced within the first few days of January to 2*s.* 1½*d.*, which was the topmost figure of the year. In September 10,000 oz. "Auerbach" offered in public sale only realised 1*s.* 3*d.* to 1*s.* 4*d.*, although 1*d.* to 1½*d.* advance on these prices was paid soon afterwards. Even a letter to a daily paper calling the attention of those interested in diamond, gold, silver, copper, and other mines to the favourable position of this article had not the desired effect, and the downward movement so far has not been arrested, the recent sales being about as low as any throughout the year.

RHUBARB.—Good to fine bold Shensi has always found a ready sale at about 3*s.* to 3*s.* 2*d.*, and a small parcel of fine realised 3*s.* 8*d.* to 4*s.* 3*d.* in July; other qualities were difficult of sale unless at ensier rates, the lowest prices being recorded in June. Within the last two months there has been a better demand, and an advance of several pence has taken place. We quote:—*Shensi*—Medium to bold good coat and pinky break, free from dark and spongy, round or flat, 3*s.* to 3*s.* 6*d.*; ditto smaller, fair coat and break part spongy, 1*s.* 3*d.* to 1*s.* 9*d.* *High-dried*—Medium to bold, good coat and break, 10*d.* to 11*d.*; small ditto, 8*d.* to 9*d.*; bold wormy rough, 7*d.* *Canton*—Medium to bold, good coat and break, 1*s.* 6*d.* to 1*s.* 9*d.*; small ditto, 1*s.* 3*d.* to 1*s.* 4*d.* per lb.

SENNA.—*Alexandrian* has been without animation, and closing quotations are:—Picked 1*s.* 6*d.* to 1*s.* 7*d.*, half-leaf 9*d.*, siftings 7*d.* *Tinnevely*—The importations this season so far are 2,000 bales less than last year, and each successive consignment placed on the market has met with good competition at advancing prices, the demand for America supporting each parcel brought forward. The first arrival of the new season's crop, which came to hand in August, sold at ½*d.* advance, whilst 600 bales in October showed 1*d.* advance, fine bold green fetching up to 1*s.* 3*d.* 500 bales mostly inferior quality were offered later in the month, and

scarcely maintained the previous quotation, but good and fine sold well—if anything, rather dearer. A good demand has since continued, partly for the States, and all qualities are readily saleable. We quote—good to bold green leaf 9*d.* to 1*s.*, good medium 6*d.* to 8*d.*, inferior to fair 2½*d.* to 5*d.*, common damaged 1½*d.* to 2*d.* per lb.

SHELLAC.—Until the middle of the year the market continued to decline, almost without interruption, week by week at the public sales, buttons suffering the heaviest, as much as 6*s.* at a time. A sense of depression prevailed, as month by month 2,000 to 3,000 cases were added to the already heavy stock, which on the publication of June statistics totalled 85,716 cases, being 10,000 in excess of last year; but during July–August advices were received, but looked upon with more or less of suspicion, reporting the Bysacke crop to be 75 per cent. less than last year, while some of the small factories had been closed owing to the scarcity of sticklac. During the autumn large buying orders were continually received from the States, the fine marks of second orange being especially in request, whilst a premium was obtainable for unworked TN quality; and, in strange contrast with the spring, the landings have since decreased month by month, the deliveries increased, with a decided reduction in the shipments, and the stock at the close is about 14,000 cases below the highest. Until recently the demand has been entirely for consumption, and prices have gradually advanced on a perfectly legitimate basis, speculators, somewhat disgusted with the collapse of the market early in the year, completely holding aloof in the meantime. Without offers forward, combined with several of the importers purchasing on this market, there seem to be indications that the before-mentioned rumours may not be without some foundation, and to a certain extent are confirmed by a falling-off in the exports from Calcutta, which for the season ending October 30 were 90,000 cwt., against 94,000 the previous year, and up to the first half of December were only 4,100 cwt., against 11,900 same period last year, with every probability of continuing. The outlook now is certainly much more encouraging to holders than it has been for many years past.

WAX (BEES).—The supplies of all descriptions have been equal to the demand, and show but little alteration for the year. *East Indian* kinds have been rather scarce, whilst *Australian* realised very full prices for good qualities. *Madagascar* being pressed forward during the summer months, recorded a decline, fair dark brown selling at 80*s.* to 83*s.*, but quickly regained the fall, and for good quality 92*s.* 6*d.* is now required. *Jamaica*.—High prices for good to fine qualities have been obtainable throughout the year without exception, opening at 6*l.* for fine yellow; up to 7*l.* 2*s.* 6*d.* was paid for similar quality in July, but since has somewhat eased, closing quotations being: good yellow and amber, 5*l.* 17*s.* 6*d.* to 6*l.* 7*s.* 6*d.*; grey and red, 5*l.* 10*s.* to 5*l.* 15*s.* per cwt.

THE AMERICAN BROMIDE TRADE.

THE *Oil, Paint, and Drug Reporter*, again referring to the alleged disagreements between the American and European makers of bromides, now states that the trouble is the outgrowth of a transaction, now about a year old, between a house in New York and a manufacturing firm in another American city, whereby the latter was supplied by the former with a certain quantity of bromide, in return for which the New York house received a specified quantity of bromide of potash manufactured from it. A portion of this lot of bromide was shipped to Germany. The buyers rejected it on the ground that it did not come up to the requirements of the German Pharmacopœia, and it was subsequently re-shipped to the States. Later the balance of the lot was sent over to Europe, where it met with the same fate, and it has been returned to America after having increased the feeling of uncertainty in the European markets, and widened the breach between the manufacturers here and abroad, while, moreover, for some time past there have been indications that there is not that degree of cordiality between the two "pools" of bromine manufacturers which formerly marked their relations.

THE OPIUM MARKET IN 1888.

MR. ALBERT MANN, in his annual review of the article, observes that although the crop has been large the arrivals have been far from heavy, and of *Smyrna* qualities we have had comparatively little. Small lots of very fine in all qualities have come to hand, but the great bulk of the receipts are most unsatisfactory, and unusually little care has been paid to assorting before shipment. Intrinsically the quality of the crop is fully up to the average, but it has been secured in bad condition, making it very unsuitable for keeping. *Malatia* of fine quality has not arrived very freely, the bulk being of quite medium quality, which up to the present has met with but small demand. The arrivals *via* Alexandretta continue made up in so unsaleable a manner that they do not realise the intrinsic value of the drug. *Salonica* has been very unsatisfactory in condition and assortment, but *Tokat* in most cases has left nothing to be desired in appearance or quality, great care having been shown in the assortment of the early arrivals. Later arrivals have been somewhat more mixed. The dark paste-thin pieces are as much disliked as ever, and it is to be regretted that producers still make it up in that manner. *Balakassar* and *Bogaditch* have come apparently without any attempt at selection, making the quality even in less demand than usual. It would have paid far better to have sent fine and secondary separately, the latter realising such high figures this season, and the fine would have had the preference in many markets where the medium *Malatia* and *Tokat* are now used. *Beybazaar*, *Yerli*, and *Karahissar* of fine quality have been very scarce, most of the lots received being much mixed. The secondary qualities are most unsightly, and only fit for manufacturers' use. *Ghevê* has been plentiful, but the condition of most parcels has prevented them being used for any other purpose than morphia-making. *Egyptian* and *Indian* have been received in small quantities, but their import is not recommended.

It appears as if, notwithstanding the late reports of frost-damage, nothing very serious or irremediable has yet occurred to warrant an upward speculative movement, and as the large transactions that have taken place this autumn must have greatly supplied consumers, there is nothing to point to any probable advance in druggists' kinds unless the spring sowings are injured, though doubtless very full prices will be obtainable for really choice parcels, the proportion of medium stuff being so unusually large. Holders will doubtless be able to get full or advanced prices for choice soft shipping; for although the very heavy shipments must have supplied the principal outlets for some time, yet the supply of suitable stuff is small, even for the outside or smaller markets. Persian is dependent a great deal on the continuance of the China demand. The present position of the Eastern markets bids fair to draw all the 1888 crop direct there, which must prevent any permanent decline in prices here.

Messrs. T. W. Bowyer & Bartlett say that the sowings for the 1889 crop were mostly got in satisfactorily and on a considerable scale, but severe weather having set in early in December, coupled with snow, some damage has been done to the young plants, and in certain districts this is reported as serious. The crop of 1888 is estimated at about 7,000 to 7,500 packages, against about 2,050 in 1887. For some time past no reliable information has been obtainable as to the arrivals, deliveries, or stocks of the various kinds and qualities of opium in this market, and they, therefore, abstain from printing statistics which can only be misleading.

"Who is your family physician, Freddy?" asked Mrs. Hendricks of the Brown boy. "We ain't got none," said the boy. "Pa's a homeopath, ma's an allopath, sister Jane is a Christian scientist, grandma and grandpa buys all the quack medicines going, uncle James believes in massage, and brother Bill is a horse doctor."

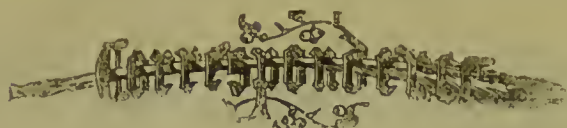
HOAXING THE DOCTORS.—On Wednesday over a dozen doctors in Bath received letters, with the Claring Cross postmark, purporting to come from Lady de Tabley, asking them to meet her at an hotel in Bath on Thursday morning, to discuss the efficacy of the Bath mineral waters. All the medical men who had received the letters appeared at the appointed hour, only to find that they were the victims of a practical joke.

LONDON DRUG STATISTICS.

The following figures refer to the stocks of drugs, &c., in the London docks and warehouses on December 31, 1888, and to the deliveries and imports into London during the year 1888 as compared with 1887:—

Article	Stocks		Imported		Delivered	
	1888	1887	1888	1887	1888	1887
Aloes . . cs & pkgs	6,989	5,218	7,375	5,070	6,108	4,969
" gounds	2,048	4,679	814	1,651	4,444	903
Anise, Star . . chta	139	181	100	217	141	275
Arrowroot . . . cks	10,879	12,552	13,025	15,736	15,106	15,056
" bxs & tins	7,860	8,304	5,421	10,274	7,007	6,475
Balsams . . cks, &c.	192	612	164	671	567	750
Bark, Cinchona, cks	102	11,333	25,744	30,043	23,295	26,572
" cases	3,332					
" bales, &c.	53,320	48,286	43,726	40,918	48,463	47,132
Borax pkgs	614	487	417	2,473	827	1,670
Calumba . . . "	1,844	2,798	1,164	3,930	1,972	2,659
Camphor . . . "	927	1,888	6,452	5,107	7,503	9,365
Cardamoms . . chta	576	727	2,656	3,479	2,837	3,482
Cochineal . . . srns	4,963	5,310	4,233	4,355	4,546	5,907
Cocc. Ind. bgs, &c.	349	286	812	219	749	453
Cream of Tartar cks	13	13	22	46	22	44
Cubebis bgs	124	113	572	467	561	446
Dragon's Blood chta	80	99	180	127	179	160
Galls, China, &c. cs	1,863	1,781	8,891	4,447	8,689	5,189
Trky & Prsn sks	2,717	2,970	7,301	6,985	7,641	7,926
Gum—						
Ammoniac pkgs	125	236	13	128	118	177
Animi & Copal pkgs	4,885	4,426	8,502	8,106	7,982	8,619
Arabic "	19,617	11,245	34,419	20,110	25,997	23,959
Asafoetida . . . "	349	450	452	72	553	399
Benjamin . . . "	1,987	1,531	3,196	2,163	2,767	2,269
Damar "	2,552	3,412	4,736	4,719	5,634	6,123
Galbanum . . . "	—	—	—	1	—	1
Gamboge . . . "	93	65	197	217	210	255
Guaiacum . . . "	16	79	22	48	83	45
Kino "	87	76	73	52	77	67
Kowrie tons	1,397	501	3,265	1,782	2,873	2,178
Mastic pkgs	33	105	67	26	135	45
Myrrh, E.I. . . . "	512	528	573	880	615	578
Olibanum "	2,728	3,984	7,241	7,349	8,430	6,823
Sandarac "	749	1,049	1,349	1,445	1,702	1,642
Tragacanth . . . "	3,709	1,904	7,899	3,508	6,694	2,203
Indigo, Bengal chta	2,602	2,915	7,179	8,049	7,492	8,720
" Madras "	838	919	1,174	1,349	1,255	1,161
" Kurpah "	4,149	2,838	10,136	7,039	8,825	8,608
" Manila "						
" Figs, &c. "	1,448	1,625	1,425	1,655	1,602	1,908
" Total East . . . "						
" Indian chta	9,037	8,297	19,914	18,092	19,174	20,397
" Spanish srns	2,019	1,835	6,248	4,244	6,064	4,338
Ipecac. casks & bgs	10	158	512	613	724	581
Jalap bls	87	146	182	114	246	122
Lac Dye chta	5,880	7,166	20	105	611	750
Myrabolanis . . . tons	7,623	10,535	8,073	13,715	11,045	11,129
Nux Vomica pkgs	1,128	546	2,263	785	1,672	898
Oils—						
Anise cs	31	171	158	185	193	180
Cassia "	39	185	171	310	234	222
Castor cks	365	846	440	1,391	751	1,141
" cs	7,218	7,515	12,147	11,539	12,654	10,463
Cocoa-nut tons	1,490	1,823	4,866	4,936	5,191	4,416
Olive cks, &c.	370	680	1,980	4,098	2,299	4,402
Palm tons	61	203	213	184	370	154
Opium chta, &c.	1,617	2,124	1,086	1,896	1,554	1,920
Rhubarb chta	1,023	1,134	1,408	1,142	1,612	1,860
Safflower bls	632	365	644	393	384	445
Saltpetre tons	586	978	3,719	5,319	4,111	5,332
Soda, Nitrate . . . "	1,008	1,549	12,309	12,107	12,313	15,617
Sarsaparilla bls	456	421	1,423	1,373	1,464	1,315
Senna bls, &c.	1,931	2,505	4,184	6,907	4,779	5,263
Shellac, Orange chta, &c.	46,486	41,880	36,799	34,347	31,993	29,313
Garnet "	15,209	15,394	9,726	11,813	9,437	8,033
Button "	7,867	11,103	7,671	8,842	11,050	9,234
Total chests	69,502	68,380	54,196	55,032	52,480	46,585
Sticklac . . . chta, &c.	3,655	4,391	1,818	1,363	3,146	1,080
Gambier tus	1,157	1,897	9,819	12,892	10,485	12,641
Catch "	3,018	945	5,734	2,485	3,670	2,881
Turmeric "	3,197	2,636	1,788	2,536	1,116	1,771
Vermilion, chta, &c.	12	63	90	141	141	132
Wax, bees' . . . bls & srns	526	812	383	883	456	1,120
" cks & cs	1,129	1,755	2,517	3,232	2,951	2,791
" cakes	17	18	48	26	10	—
Wax, Japan . . . pkgs	1,315	912	1,914	1,102	1,446	1,536

SULPHONAL reduces the night-sweats of phthisis. In this case 10-grain doses given a few hours before bedtime are sufficient.



Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish: if you do not, please use a distinctive nom-de-plume.

Write on one side of the paper only; and devote a separate piece of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulae consult the last volume, if you have it.

Letters, queries, &c. will be attended to in the order received.

Aqua Menthae.

SIR,—Whilst reading the correspondence in your last issue on the "aqua menthae" question, my apprentice handed me the following prescription:—

Chlorodyni	℥i.
Potass. bicarb.	℥ij.
Pulv. rhei	grs. xij.
Tr. zingib.	℥iss.
Nepenthe	℥iss.
Aqua menthae ad.	℥vj.
℥ss. bis die.	

I dispensed aqua menthae pip.

There is a popular mixture for coughs sold here consisting of paregoric, oil of aniseed, oil of peppermint, and tincture of opium: a pennyworth of each is generally asked for, and the third ingredient often called "ile o' mint." No one in this district would think of supplying oil of spearmint.

Yours truly,

Oldham, December 31. C. GRANVILLE WOOD.

SIR,—The statement made by Mr. G. A. Parkin last week to the effect that the London Pharmacopoeia of 1836 gives "spearmint water" and "mint water" as the English readings for aqua menthae viridis is quite incorrect. That Pharmacopoeia gives no English readings; and, so far as the mint waters are concerned, it simply gives the directions for making aqua menthae piperitæ, and states that aqua menthae pulegii and aqua menthae viridis are to be prepared in the same way. Mr. Parkin has probably taken his statement from some commentator or translator.

Yours truly,

PHAR. LOND. (31/60.)

I have always used, and should use, aq. menth. pip. for aq. menth. unless I knew the virid. was intended, or had been used before.

F. W. B. (209/38.)

SIR,—Permit me to protest against the assumption of any value to be attached to the difference in the average output of aq. menth. pip. against that of aq. menth. virid. as reported in your last issue. It is not a question as to which is in greatest demand, as everybody in the trade must know that "aq. menth. pip." is in constant request, whilst the "virid." is only occasionally ordered. The only question raised was, "What is meant when aq. menthae is ordered?"

Yours truly,

ATTRACTION. (208/76)

The Wine Licence.

SIR,—Wishing to be on the safe side—and just at present it is impossible to know when you are—I wrote to the Inland Revenue authorities, enclosing the formula you publish in the DIARY for port wine and beef jelly, and inquiring if the sale of such an article would necessitate the holding of a wine licence. In reply an officer waited upon me, and

informed me they must refuse to give a definite answer till I had forwarded a sample of the article for analysis. It seems probable, therefore, that the authorities would object to the jelly being sold if it contained more than a certain percentage of alcohol, and this question should certainly be definitely settled before the article is put up for sale. It will soon be necessary for the Pharmaceutical Society to add another subject to their examination list—viz., "the laws relating to pharmacy."

I am, yours, &c.,

T. H. POWELL.

116 Denmark Hill, S.E., January 1.

What is Magnesia?

SIR, I have always supplied light carbonate when magnesia is ordered. In the London Dispensatory the two are distinguished as "magnesia usta, calcined magnesia," and "magnesia, magnesia." Magnesia usta is ordered to be prepared by heating magnesia.

Under the heading magnesia is the syn. carbonate of magnesia, and the preparation is for the carbonate.

Yours truly,

MAG. CARB. (209/30.)

SIR.—All my experience with regard to the above agrees with that of the majority of your correspondents. In the Midland Counties, London, South Wales, Lancashire, and the North, I have always given carbonate of magnesia for pennyworths.

Yours truly,

F. W. B. (209/38.)

"Heder" wishes us to state that the word "but" in the tenth line of his letter last week should be "lest."

Danger of "Glittering Frost."

SIR,—After much hesitation, and with the deepest concern, I feel it a duty, with your help, to bring before my fellow-countrymen what is now an unseen, and will be, I fear, a great national danger.

For many years it has been the custom of manufacturers to use glass in various sizes for decorating flowers and fancy articles by means of adhesive substances. In this form it is attended with but little danger; but within the last few years glass flux has been universally introduced by fancy dealers, stationers, and general warehousemen, as "Glittering Frost," "Frost Powder," &c., and its extreme cheapness and pretty effect readily induce people to use it by merely dusting it extensively on their wearing apparel, flowers, and ornaments, before attending places of amusement.

A penny packet contains probably thousands of deadly particles of glass which soon float in the air in a heated ball-room, and are inhaled by persons present. I should like to have the opinion of your medical readers as to the effect of the glass flux on the lungs, as I can say that at a parish-gathering this Christmas, several persons present, including myself, suffered from irritation of the throat, while others were affected in the eyes, and last season I saw many rubbing and afterwards bathing their faces and hands, little knowing what was producing the irritation of the skin.

Trusting your column will be the means of deterring people from the use of "Glittering Frost," or "Glass Atoms," and hoping that scientific opinion may be elicited on the matter,

I am, yours faithfully,

Coventry, December 29.

F. BIRD.

"The House of Pears"

SIR,—As a retail chemist and druggist, I should like to add a line to the notice of Messrs. Pears's establishment in your last issue.

It is quite natural that a journalist should make the most of the success of so advertising a firm, but for my own part, I believe Messrs. Pears's success lies, to a considerable extent, in their uniformly just and liberal business policy in their transactions with the retail trade. I have dealt with them over twenty years, not only for their transparent, but also for the ordinary toilet soaps, which are quite worthy of their reputation. Of Messrs. Pears a retailer may buy a not

very large parcel at the same rate as the large houses pay for, say, a 1,000*l.* order. Some years ago the large stores combined to boycott the firm for this, and supplied their customers with a substitute made for this purpose. This did not do, and the stores were compelled very soon to return to the genuine article.

The soaps sent out by Messrs. Pears are always good alike. They have repeatedly referred to me individuals who have sent their orders direct to the firm. They always send a reminder of the dates when payments are due, and, in short, after a rather wide business experience, I consider them a model wholesale house. I think this word rather magnanimous on my part: they have just refused me a second card of "Bubbles."

Redhill.

Yours obediently,

THOMAS PADWICK.

Removing Mildew.

4/209. *Terra Regina* (a Colonial subscriber) asks:—Can any subscriber inform me what is used by Lancashire bleachers, callenders, &c., to remove mildew from calico and linen? My customers are not satisfied with salts of lemon, acid, mur. dil., &c. I have tried chlorinated lime, but without success. I have examined mildew with the microscope; I find it to be a fungoid growth.

Patent Medicines.

SIR,—The axiom that "A prophet is not without honour save in his own country" has some bearing on the speciality question; as far as my experience goes many persons prefer medicines that come from afar to those prepared by one living in their midst. I think this circumstance might be taken advantage of by a mutual exchange or purchase of specialities between chemists residing far apart; but in order to be successful two conditions should be observed. First, the specialities must be those not supplied to the wholesale trade, so that the purchasing chemist would be a *bonâ-fide* sole agent for a town or district, without the danger of losing the fruits of his efforts in pushing the articles when their reputation is established in a locality. Secondly, the formula, or at least the proportions of the active ingredients, should be made known to the seller so that he could recommend them with confidence in cases where he thought suitable. I should be glad to correspond with anyone who approves of this plan.

Yours truly,

H. CUMBER, JUN.

4 Fountain Street, Guernsey, December 22.

A Policy Wanted.

St. Andrew (55/205) says:—If "Economic" thinks to get back store customers by lowering his prices to their figure he will find himself mistaken, as the majority will stick to the stores, even if they are charged more. But as cutting stores are sure to visit him before long, I should advise him to be first in the field.

Mr. Henry J. Dalglish, Exeter, would not recommend "Economic" to commence a reduction of prices, as, were he to do so, the other eighteen members of the fraternity would be scarcely likely to stand by and see him do all the trade. One by one they would follow; prices would be brought to a dead level, and "Economic" would not be benefited one iota. On the contrary, the year's balance would probably show a slightly increased trade but a greatly reduced profit, and his last state would be worse than the first. Rather let "Economic" wait until there is an intimation of the stores opening in his town, then at once agree with his fellow-craftsmen to reduce their prices and meet the foe face to face. This example was followed recently at Bournemouth. As soon as it was announced that there were some cutting chemists about to open, the chemists of the town held a meeting, and unanimously decided to reduce prices of their patent and proprietary articles at once. The result was the retention of a large proportion of that branch of the trade which would have otherwise assisted the new-comers to establish a reputation as "cheap chemists." At Cheltenham, when the Co-operative Drug Company arrived, the chemists dis-

cussed amongst themselves and decided to give the drug company rope enough to let them hang themselves. One chemist carefully calculated their (the drug company's) expenses, and prophesied for them an existence of six months only. In less than a year his own shop knew him no more, while the drug company still flourishes. At Bath, again, it was not until too late that the chemists decided to reduce their prices for patents—months after the stores had established their reputation. Many other instances I could give, but on these I would strongly advise "Economic" not to provoke the reduction, but to be on the alert, and immediately be hears of an attack on his town call his brother chemists and decide upon a united policy of reduced prices.

The Carbolic-acid Demon.

SIR,—A day or two ago there dawned upon me a little light as to the character of the opposition with which we may meet in our endeavour to obtain from the Legislature the protection we want for our trade rights. A military gentleman, who is a ready-money customer at the stores and a long-winded one with me, was talking of the proposed inclusion of carbolic acid, and strongly argued about the hardship of being compelled to give chemists' prices, and of the inconvenience of country families having to send to the distant chemist for a supply. Shameful thought, that price and convenience should be of more importance than the security of human life! Certainly carbolic acid is a greater necessity in country places than in well-drained towns. But this is no argument for the village draper and grocer selling it. The M.P.'s and other gentry who keep the stores going will be the very men to oppose any further trade rights and privileges being granted to us. These men will find their own trading interests the first consideration. I have always been of opinion that their absorption in trade as shareholders and directors has been the chief reason for the backwardness of the Pharmaceutical Society in attacking the legal flaw which allows companies to be dispensing chemists. The Council probably think that they cannot afford to fight the store-traders in Parliament.

Yours truly,

HEDER.

Dental Advice Wanted.

SIR,—Would any of your numerous subscribers be good enough to reply to the following?

I am a registered dentist, and am desirous of using nitrous oxide gas in performing extractions, and a little practical information would be highly esteemed by myself, and probably also by a goodly number of your readers.

What apparatus is required, and its cost? What quantity of the gas is usually packed, and what is the general method of storing it? What are its keeping properties, its cost, and whence are the articles best procurable.

Yours truly,

LUX. (206,61)

December 24.

Window-dressing.

SIR,—Allow me to express my appreciation of the hints on window-dressing. I am afraid we have much to learn in that art. I noticed the other day a show-card in a prominent position in the window of a chemist announcing, in bold black letters, that "spring medicines" were being sold, or rather were for sale.

Yours,

LIGNUM. (210,12)

The Future of the Drug Trade.

SIR,—In most of the correspondence that has lately taken place respecting the unsatisfactory state of the trade, the most serious aspect of the question has been overlooked. The cry has been about patent medicines, the trade in which has well-nigh left us, and I doubt, if all chemists were to lower their prices, if it would ever return to them; and if it did, it would not be of much use. No, the most important question, in my opinion, is "the dispensing of medicines." If that is not secured to us, that too will leave us before long, for very few of the new-comers into the medical profession

write prescriptions. The chemist is fast becoming a thorough quack, and it isn't his fault; he is forced into it. He puts up a host of proprietary articles, and prescribes over the counter for his customers, because if he sent them to the doctor he not only would get nothing out of them, but possibly never see them in his shop again. Surely this is an unhealthy state of things. It should not be a difficult matter for the heads of the Pharmaceutical Society and the heads of the medical profession to meet and arrange that a Bill should be passed prohibiting dispensing by the doctor and prescribing by the chemist. Such a Bill would be beneficial all round—the doctor would get more patients, the chemist more dispensing, and the public the advantage of specially trained and qualified men to prepare their medicines, instead of the doctor's groom or errand lad. We pass stringent examinations to qualify us to dispense medicines—we ought to have those medicines to dispense. Why haven't we?

Yours, &c.,

FORWARD.

Dispensing for Chemists.

Saccharin writes:—Cannot we make an attempt to get the dispensing of prescriptions into our own hands? Now that we have had the *Lancet* speaking, and with no uncertain sound, in our favour, shall we not be letting a favourable opportunity slip away if we do not make an effort to obtain this much-to-be-desired object, which after all is our moral, if not legal, right? An example has been set us by the architects and surveyors, who, a few years ago, when in a position somewhat similar to ours as regards the attitude of their Institute (analogous to our Society), formed an entirely new society, and have this year succeeded in introducing a Bill into Parliament for the protection of their profession from the encroachments of builders, &c., who may be likened to our "cutting grocers and stores." This has been accomplished, not only without help from their Institute, but against its most determined opposition. If this body of men (less in number than we are) can make such progress, surely we ought to be able to do something towards the bettering of our position without asking help from any outsiders. We only want a leader and a definite plan of campaign, and as the architects looked to the *Building News* for help in their time of trouble (and obtained it), we look to you, sir, to do something for the better organisation of our scattered forces, and we believe that we shall not look in vain.

Dates's Ointment.

L. & C. (205/65) write:—We copy this from an old recipe, probably thirty or more years old. Was not Date a chemist at Watchett, Somerset? We fancy our firm obtained the formula from him:—

Lard	12 lbs.
Spermacei	4½ oz.
White wax	4½ "
Red precipitate	4½ "
Ol. origani	20 min.
Hyd. sulph. rect.	q.s.

Reducing Prices.

SIR,—In your last issue "Chemicus" says that, in his case, a reduction in the prices of patents, &c., has been accompanied by a falling-off in sales. Two incidents which happened within my hearing on Friday last suggest similar reflections. A soldier asked for a bottle of Seigel's syrup, and as it was being wrapped up inquired the price. Upon being told 2s. 3d. he asked to look at it, when he turned it over and read the label, evidently in great doubt. At last he flatly declined to have it, saying the genuine Seigel would cost 2s. 6d. An old lady came in for 1 oz. castor oil, and was charged 2d. She hesitated, and said, "Are you sure you have given me the best? I always pay 3d." These events prove that a remnant yet remain faithful to the chemist, and are willing to pay for the sense of safety which they experience when dealing with him. How long this faith will remain becomes doubtful when we hear of a chemist who prepares his laudanum with old ale, and of others who take either 4d. or 3d. for tinctures—in the latter case, as my informant said, "first diluting with aqua." Yours truly,

December 21.

A. E. I. (205/34.)

DISPENSING NOTES.

The opinions of practical readers are invited on subjects discussed under this heading.

Tinct. Chloroform.

SIR,—In reply to a query on the above subject in your last week's issue, I venture to contribute a few remarks. The question is of importance, not only concerning the appearance of the mixture, but also the difference in dose of chloroform; the one preparation being double the strength of the other. There is not the least doubt but that tinct. chloroform. co. B.P. is the preparation desired. I have, on more than one occasion, had opportunity to make communication with doctors who had committed this ambiguity, and found that the B.P. tincture was intended.

Such ambiguities are undoubtedly troublesome, but can be greatly reduced in number by the chemist who first dispenses the prescription taking care to mark which preparation he used.

Richmond, S.W., Dec. 24.

GEORGE MELVIN.

SIR,—I should think the most orthodox way would be for the party who first dispenses the prescription to mark opposite, thus—(sp.) tr. chloroform. 3ij. (co.), indicating respectively which preparation he has thought proper to use, tr. chloroform, being neither (to my knowledge) "official or officinal."

Yours truly,

York.

GEORGE A. PARKIN.

Carbolie-acid Pills.

The following prescription appeared in our issue of December 22:—

Acid. carbolici	5j.
Strychnin. sulph.	gr. j.
Polv. digitalis	5j.
Iodoform	5j.
Ferri iodidi	5ij.
M. Ft. pilule lx.	

Mr. Kransen, apotheker in Otterup, Denmark, sends the following directions, in Latin, as to how it should be dispensed:—

Take of powdered iron and resublimed iodine sufficient quantities to make 2 drachms of ferrous iodide, and stir together in a mortar with a little honey until the reaction is complete: then add the other ingredients of the prescription in the order in which they are given, and just as much wheaten flour as will make a mass, which divide into sixty pills.

Ferri et Quinina Citras in Powders.

SIR,—An English lady visitor, who yearly makes of Malta her winter resort, presented to me a prescription a few days ago composed of the following substances:—

Citrate of iron and quinine	5ij.
Arsen. of soda	gr. ij.
Alcoh. extract of nux vom.	gr. vj.
M. et m. 24 powders; to be taken three a day as directed.	

Being aware of the deliquescent properties of the citrate of iron and quinine, so apt to become moist much more with the arseniate of soda, I naturally declined to serve the prescription in powders, explaining my reasons for so doing, and offering to substitute for the powders gelatinous capsules. The lady objected to capsules on the plea that she would not have been able to swallow them, and added that the very identical prescription had been served in London in powders, made up in ordinary paper (not vellum paper), and that the powders kept well and never became moist, and were perfectly dry and good to the end.

My client, with a degree of straightforward honesty which I sincerely admire, declared to me that a similar objection to mine had been made to her at Sorrento, in Italy. But my colleague at Sorrento, at the request of the lady, served the

prescription in powders without using impermeable paper, with the result that, with the exception of the first dose, taken almost immediately, the others became perfectly moist. The prescription was served by me as a mixture at the same doses.

I shall feel exceedingly obliged if you will be so good as to enlighten me on the subject by kindly telling me how these powders are to be worked to avoid the inevitable consequences already alluded to.

Yours truly,

Malta, December 20.

COSTANTINO MIZZI.

[We have dispensed similar powders, using waxed paper for the first wrapper and ordinary powder paper to finish off. This is the way in which such powders are generally dispensed.]

A Lanolin Application.

Yesmur (209/13) has had the following prescription to dispense, and wishes to know how it should be done:—

Ext. bellad.	..	..	..	..	5ss.
Liq. morph. hyd.	..	..	..	..	5ij.
Aq. bull.	..	..	..	..	5iss.
Lanolin	..	..	..	..	3ij.

Fiat applic.

To be applied with a camels'-hair brush.

208/69. *W. H. L.*—The second ingredient of your prescription is ac. lactic. dilut., B.P.; and the third, quinine hydrochlor. "Dil" is a *lapsus penne*.

LEGAL INQUIRIES.

25/132. *Rochester.*—It would not be legal for an unqualified person to describe himself on his shop-front as "A. B., late assistant to C. D., chemist and druggist." The Act meets this evasion by rendering it penal for unregistered persons "to take, use, or exhibit" the title. It is more doubtful whether the advertisement of such a description in a newspaper would be an infringement of the statute.

23/206. *Honesty*—It is not legal for an unqualified person to describe himself as a druggist. Give notice to the secretary of the Pharmaceutical Society, sending up one of the handbills. We do not know that there is any legal standard for chlorodyne lozenges, and should hardly think a prosecution would succeed in respect of the sale of these *sine morphia*.

32/206. *Cautious.*—We cannot undertake to make searches of the "Trade Marks Register." This must be done at the Trade Marks Office, Southampton Buildings, Chancery Lane, a fee of 1s. being charged.

48/207. *Hotspur.*—We do not see that the title "St. Helen's Oil" could be an infringement of St. Jacob's Oil; but the package might be put up so as to infringe in other respects.

72/257. *Hydrastin.*—Can unqualified persons give poisons away? As far as the Pharmacy Act goes, yes; but they might be prosecuted for manslaughter, or for causing grievous bodily injury, if by their action serious results ensued.—Can tinct. rhei co. P.L. be sold when "tincture of rhubarb" is asked for? It does not certainly follow that "tincture of rhubarb" means necessarily the B.P. article; but if the Court should be satisfied by evidence that this preparation is that which is almost invariably sold when "tincture of rhubarb" is asked for they would probably convict.—Is liability incurred under the Sale of Food and Drugs Act by selling quinine wine containing more quinine than is prescribed in the official formula? It might be, if the Court considered that such extra quinine was to the prejudice of the purchaser.—If you attach a label to the patent medicine hinting that its effects may be bad, and if a court considered that your object in so doing was to benefit your own business at the expense of someone else's, you would rightly be liable to heavy damages for libel.

MISCELLANEOUS INQUIRIES.

A large number of correspondents ask us for formulæ which have already been published in this journal. It is not fair to more careful readers that we should frequently repeat such information, and so long as the back numbers containing the formulæ or replies required are in print we must decline to do so. Back numbers of our weekly issue can be obtained from the publisher at 4d. each.

203/57. *D. T. E.*—Try the firm which you name. They make all kinds of compressed goods to order, if they do not have them in stock.

59/204. *T. G. S.*—If you have been for three years engaged in the translation and dispensing of prescriptions, and your employer will certify that, you will be eligible.

25/204. *Viridis.*—Better first arrange with applicant. Probably you have the power to stop his registration.

202/27. *F. E. J.*—Calamus root is a fair Substitute for Tobacco as a masticatory; it very frequently weans the chewer from the "weed."

204/42. *J. Burt.*—The Odour of Iron when rubbed is due to the electric action, and the consequent production of the "ozone" which exists round electric machines.

204/67. *A. F. H.*—It is not advisable to heat the pancreatic solution. If it contains albumen the amount of heat required to coagulate the latter would be sufficient to destroy the ferment.

138/4. *A Hull Subscriber.*—The portion of otto of rose, insoluble in rectified spirit, is the stearoptene, which is inodorous, so that filtration will not impair the quality of the perfume.

204/9. *Loquax.*—Please refer to index.

To Deodorise Petroleum.—Mr. F. Detsienji recommends oil of mirbane.

205/69. *Elbana.*—Please consult Ure's "Dictionary" or Roscoe and Schorlemmer's "Chemistry."

204/60. *H. M.*—You will find the information you require in the DIARY.

205/26. *Nemo.*—A reference to the Pharmacopœia will show acetic acid 28 per cent. saturated with ammonia is only about five times the strength of liq. ammon. acet.

203/62. *Ol. Cajuputi.*—Ten minims of a 10-per-cent. solution of cocaine—preferably freshly made—is used for dental purposes, and is injected round the roots of the tooth by means of a hypodermic syringe. You should not use it until you have had some practical experience with it under one who knows more than yourself, as it not infrequently happens that patients collapse under its use. We do not know of any book treating on this subject specially.

6/138. *A. P. S.* asks:—"Can you give me any information with regard to membership of the Trade Marks Protection Society? It does not involve any subscription, but how can it exist without?" [We presume its conductors anticipate that, whenever any necessity for legal action arises, they will be likely to make clients of their members.]

206/53. *Cephaelis*.—*Calcei Chloridum* B.P. is dried, though not anhydrous. The B.P. article is the proper one to supply by prescription.

206/30. *Apprentice*.—Add the wine.

21/12. *J. S. W.*.—You will have to get a local tinman to make the pill-coaters, as page 83 of the "Art of Dispensing." We do not know of any sundries house who stocks them, although it might pay them to do so. This correspondent writes:—"Had I been the favoured possessor of this book in '75 I would have been richer by 1,000%, for I've paid this for my lack of its tips." This beats Nitrate shares.

144/2. *Oldham*.—It is almost impossible to remove the last trace of odour from *Bisulphide of Carbon*. It owes its odour to the presence of free sulphur, and this is most effectually removed by shaking with a little mercury and distilling. This is to be repeated three or four times. The solvent properties of the bisulphide are not affected.

200/20. *Quercus*.—(1) Perhaps an advertisement in our Exchange column will find the gentleman. (2) To restore the colour and the odour (partially) of oil of lavender, dissolve 10 grains of permanganate of potash in 5 oz. of water, add 1 drachm of dilute sulphuric acid, then 5 oz. of the oil, and shake well for a few minutes. Allow the oil to separate, decant, and wash with its own volume of lime-water, then with pure water. Oil of bergamot may be treated in the same way.

208/35. *Diastase*.—The actual amount of diastase in *Extract of Malt* has not been determined, and it is questionable if it can be. The only thing that can be done is to determine the diastatic power of the extract. At least 1 gramme of starch should be converted in half an hour at a temperature of 140° F., by from 15 to 20 grammes of extract. Dunstan and Dimmock examined a number of specimens some years ago, and their best results were obtained with an extract containing water, 19.6; ash, 1.4; maltose, 67; dextrin, 5.1; albuminoids, 7.7; P_2O_5 , 0.5 per cent.; and 17.3 grammes of this extract converted 1 gramme of starch in the minimum limit of time. This we should consider an excellent sample.

209/40. *Roose*.—A mixture of solution of ammonia and methylated spirit (equal parts) is the best thing for *Reviving Black Hats*.

206/40. *P. H. Marsden*.—*Brazil-nut Oil*.—The kernels of the fruit of *Bertholletia excelsa* contain from 60 to 67 per cent. of a pale yellow, tasteless, and inodorous oil, which is obtained by pressure. Its specific gravity is 0.9185 at the normal temperature. At 34° F. it congeals to a semi-solid white mass. The fresh oil is used in South America for dietetic purposes. Otherwise it is employed in the manufacture of soap and as a lamp-oil. Its characteristic reaction is the rose-colour which it gives with zinc chloride.

208/23. *B. J. E.*.—*White Oils*.—Judging from your specimens, we should say that its badness is due to faulty manipulation. You cannot go wrong, however, with the following formula:—

	Oz.
Oil of turpentine	8
Strong solution of ammonia	3
Soft soap	4

Digest together with occasional agitation until the mixture is uniform. Then add 45 oz. of water, and, lastly, 1 oz. of camphor dissolved in 2 oz. of methylated spirit.

209/13. *Yexmur*.—We do not know of any syrup which goes specially by the name "syrup of the triple bromides," probably Fletcher's syrup of the hydrobromates is meant.

206 31. *B. D. G.*.—The following has been already published as a formula for *Warner's Safe Cure*:—

Liverwort	1 oz.
Nitrate of potash	320 grs.
Rectified spirit	2 oz.
Glycerine	12 drs.
Essence of wintergreen	40 minims
Water	q.s.

Infuse the liverwort in 16 oz. of hot water for two hours, strain, dissolve the nitre in the infusion, and, when cold, the rest of the ingredients in a proper manner, making up to 16 oz. with water.

We presume that this is for the liver.

21/198. *Alpha*.—The following solution has been recommended for the preparation of *Styptic Wool*:—

	Parts
Solution of perchloride of iron (neutral, sp. gr. 1.26)	30
Distilled water	100
Alum	10

Dip absorbent cotton into the solution, press out as much as possible and dry in the open air.

205/19. *Manitoba*.—Please refer to index, under Books.

143 41. *Pharmacien*.—*Lime-juice Cough Syrup*.—The following formula may suit you for this:—

Syrup. scillæ	3j.
Tinct. chloroformi co.	3ss.
" limonis	3ss.
Acid. citric.	3j.
Syrup. toluatan.	3iij.
Aque ad	3vj.

Misc.

Dose: A teaspoonful thrice daily.

The quantity of water given in the *DIARY* for elixir rose pour les dents is 2 oz.; of camphor in the dental stopping, 8 oz.; and of tincture of quillaia in the liquid dentifrice, 16 oz. *Oil of Cananga Odorata* has an odour somewhat resembling ylang-ylang, and is used as a cheap substitute for it. See this journal October 22, 1887, page 525, and April 7, 1888, page 470. For herb-beer extract consult the index of last volume. We do not have the formula for Dr. Coffin's dentifrice.

209/28. *Alma*.—A popular *Curling Hair-wash* which we examined some time ago was simply lime-water. Taking this fact as a basis for operations, you should readily make a harmless preparation.

209/27. *J. B.*.—Filter the yeast liquor through felt filtering bags. If this does not clarify it thoroughly, you will have to use finings—say, half a drachm of isinglass to each gallon.

209/51. *Australian Febrifuge*. Mag. sulph. pulv. coloured with rad. glycerh. pulv. [Sent by Mr. R. Hudson, 115 Kirkgate, Wakefield.]

Information Wanted.

[Replies to the following requests are solicited by correspondents of THE CHEMIST AND DRUGGIST.]

208/69. Are magnesias carbonate (block and powder) and calcined used for any other than medicinal purposes, and, if so, for what?

208/43. Wanted, a good formula for "hair-curling fluid."

203/39. What is used in France instead of rennet for curdling milk?

143/41. Addresses of makers of farina (potato starch).

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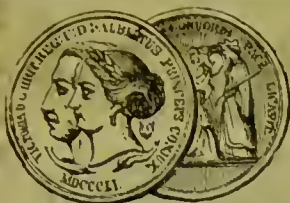
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Towle's Chlorodyne	s. d. £ s. d.	
Ditto	1 1½	0 8 6
Ditto (3 fluid oz.)	2 9	1 3 0
Ditto (8 “ “)	4 6	1 16 0
Ditto (Original and only Genuine)	11 0	4 13 0
Liq. Chlorodyni (Preparation) ½ lb. ..		1 10 0
Ditto ditto ½ lb. ..		2 14 0
Ditto ditto 1 lb. ..		4 16 0
Winchester Quarts (6 lb.) 7/6 per lb., bottles free.		
Towle's Antibilious Pills	1 1½	0 8 6
Ditto	2 9	1 3 0
Towle's Chlorodyne Lozenges	0 7½	0 5 3
Ditto Jujubes	1 1½	0 8 6
Ditto in bulk, bottles free, containing 1 lb., 2/9 each.		
Ditto ditto 1 lb. 10 oz., 4/6 “		
Ditto ditto 4 lb., 10/- “		
N.B.—The Commissioners will allow them to be sold by the retailers without further duty, provided they are simply wrapped in paper, and not enclosed in a box, bottle, or packet.		
Thornton's Celebrated Toilet Cream	1 0	0 9 0
Ditto	1 6	0 14 0
Ditto	2 6	1 4 0
Amboline (Registered Trade Mark)	2 6	1 4 0
The Thornton (Red) Lotion (Stamped)	2 6	1 4 0
Thornton's Paragon Hair Wash	1 0	0 9 0
Ditto	2 6	1 4 0

Posters, Bills, and Showcards on application.

£5 worth (assorted or otherwise) Carriage Paid.

7 lb. Lozenges and upwards stamped with Chemists' own name, free of charge.

A. P. TOWLE & SON.

75 BACK PICCADILLY,
MANCHESTER, December, 1886.

WYLEYS & CO.

MANUFACTURING CHEMISTS AND DRUG GRINDERS.

WAREHOUSES, LABORATORIES, & DRUG MILLS, COVENTRY.

COATED PILLS.

Estimates for making and coating according to private recipes will be forwarded on application.

Our pill department is now a most important branch of our business; and we have a large staff exclusively engaged in pill making. All mixing, cutting, rounding, nicking, &c., is accomplished with the aid of steam machinery, by which means we attain a uniformity in composition and size such as cannot be equalled by hand-work.

WYLEYS' PEARL-COATED PILLS.

Our coating is well known as possessed of excellent keeping qualities, being thin in substance, soluble, and well adapted to retain the essential oils contained in the pill masses.

For finish, and general good appearance, they will compare most favourably with any in the market.

WYLEYS' GELATINE-COATED OVAL PILLS.

The only oval gelatine-coated pills of English manufacture in the market. The distinctive colours of the ingredients contained within them show through the transparent covering, and our gelatine-coated pills are admirably adapted for the elegant administration of single drugs, as well as compound pill masses.

Our "Prices Current" contains an extensive list of coated pills, showing formulae and prices, together with a number of TESTIMONIALS.

PILL VASES (GOLD LABELLED).

We stock handsome vases, adapted for Soluble Pearl or Gelatine-coated Pills, and labelled according to the following varieties, "Liver," "Female," "Castor Oil," "Aperient," "Compound Rhubarb," "Digestive," "Rheumatic," "Cough."

PRICES.

Small, to hold 2 to 3 gross 3/6 each
Large, to hold 7 to 8 gross 5/- "

These may be had filled according to any of the numbers given in our list, or with special pills to private formulae. As examples of prices, we quote:—

No.	Pearl-coated.	Oval Gelatine.
No. 211 (Liver) .. per gross..	1/8	2/2
" 258 (Liver) .. "	1/4	1/10
" 29 (Aperient) .. "	10d.	1/4
" 537 (Digestive) .. "	1/4	1/10
" 480 (Female) .. "	2/-	2/6
" 623 (Female) .. "	1/3	1/9
" 80 (Rheumatic) .. "	2/-	2/6
" 619 (Cough) .. "	1/6	2/-

Special quotations for large quantities.

COMPRESSED PELLETS.

We are offering Glass-topped Boxes, suitable for display on the counter, and containing two dozen heart-shaped bottles, with white metal screw caps, and filled with pellets (assorted) at 6/ per box net cash.

List of Pellets supplied.

Ammonium Chloride. Sodium Bicarbonate.
Potassium Chlorate. Sal Prunella.
Potassium Chlorate and Borax. Soda Mints.
Potassium Bicarbonate. Voice.

Also similar Glass-topped Boxes containing 3 doz. Metallic Boxes, filled with an assortment of pellets, as above, at 7/6 per box net cash.

For prices in bulk, see "Prices Current."

GLYCERINE SUPPOSITORIES

(WYLEYS)

FOR USE IN CONSTIPATION.

AS FIRST INTRODUCED BY OURSELVES.

Glycerine administered in the form of a Suppository acts equally as well as when injected by means of a special syringe, whilst the advantage of the Suppository form is obvious.

We prepare these Suppositories in two sizes, which are supplied in slide boxes, each containing one dozen.

Ordinary (Pessary size) .. 1/6 dozen.

Small, for Children.. .. 9d. "

MALTED FOOD FOR INFANTS & INVALIDS.

In addition to sending out the above article in bulk, we are supplying it in Half-pound and One Pound Cardboard Cases, ATTRACTIVE IN APPEARANCE, and labelled without Name and Address.

PRICES.—In Bulk, 42/- per cwt.;
Half-pound Packages, 4/- per doz.;
One Pound Packages, 7/6 (subject to Patent Medicine Discount).

Concentrated Infusions and Decoctions, Granular Effervescent Preparations, Extracts, Spt. Ether. Nit., Spt. Ammon. Arom., Medicated Suppositories, Pessaries, Bougies, and Plasters, Medico-Pharmaceutical Appliances, and all New Preparations and Medical Specialities.

THE DURAPLASTIC COATED HORSE BALL.

(PATENTED. No. 15215.)

*Extract from "The Veterinary Journal,"
December, 1886.*

Messrs. Wyleys & Co. have introduced a description of horse ball which appears to possess several notable advantages which should commend it to veterinary surgeons. These advantages are related to its shape, coating, and the solubility of this coating. The shape is exactly that of an elongated conical shot, which gives it the fewest possible points of resistance to entering the pharynx and oesophagus, enabling it to pass easily into the stomach, and reducing to a minimum the possibility of accident. The coating is on Fletcher's patent principle, and being absolutely air-tight, the therapeutic properties of the remedies it envelops remain unimpaired for any length of time; while the ball is kept sufficiently firm to retain its shape, and is yet pliant enough to adapt itself to the fingers during administration. In addition to this, the coating is so soluble that it dissolves in less than two minutes at the normal temperature of the viscera, whereby the prompt action of the medicament is ensured, a point of much importance in urgent cases. The elegance and form of the bolus is in striking contrast to the old-fashioned paper-covered article, with its flat angular ends, and its too hard or too soft consistency.

No. 4.—Alterative Balls ..	24/ per gross
" 5.—Astringent Balls ..	24/ "
" 12.—Condition Balls ..	24/ "
" 6.—Cordial Balls ..	24/ "
" 7.—Cough Balls ..	24/ "
" 16.—Cough Balls ..	27/ "
" 17.—Cough Balls ..	27/ "
" 8.—Diuretic Balls ..	24/ "
" 9.—Fever Balls ..	24/ "
" 1.—Physic Balls ..	24/ "
" 2.—Physic Balls ..	30/ "
" 3.—Physic Balls ..	36/ "
" 18.—Physic Balls ..	42/ "
" 19.—Physic Balls ..	48/ "
" 15.—Stimulating Balls ..	24/ "
" 10.—Tonic Balls ..	24/ "
" 11.—Tonic Balls ..	20/ "
" 13.—Worm Balls ..	30/ "
" 14.—Worm Balls ..	60/ "

PRIVATE FORMULÆ.—WYLEYS & CO. will be glad to prepare Patent Duraplastic Balls from private recipes. Arrangements can also be made to have the name of the Chemist upon each Ball if desired upon orders of 2 gross of assorted Balls.

All Balls are packed in boxes of one dozen.
Samples forwarded free on application.

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THE ACTIVE PRINCIPLE OF ALOES,

MANUFACTURED BY THE DISCOVERERS—
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MANUFACTURING CHEMISTS, WHOLESALE & EXPORT DRUG MERCHANTS HULL,

Manufacturers of all Pharmaceutical Preparations on the best and most improved principles.
QUOTATIONS ON APPLICATION.

SOLUT. ÆTHERIS NITROSI (Æther. Hyponit.)

1 part to 5 Sp. Vinyl Rect. 56 o.p. makes Sp. Æth. Nit. 850.

This concentrated preparation is carefully drawn in our own laboratory, is highly recommended, and is daily finding increased favour with the trade for making Sp. Nitre, as required for use, and thus avoiding the risk of a development of free acid, which is more or less prevalent in Sp. Nitre that has been drawn some time. Price in Winchester Quarts, 8s. per lb., net.

Importers of Cod Liver, Castor, and Olive Oils; Otto de Rose, and all Essential Oils; Valentia Saffron; Vanillas; Fruit Essences; Carmine; Aniline Dyes; Bees Wax, &c., &c. Applications for Special Quotations invited.

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DALMATIAN INSECT POWDER
(FROM CLOSED FLOWERS).

1-cwt. Case of Tins Mag. Cit. Gran. Eff. at 6½d. per lb. | 28-lb. Tins Mag. Cit. Gran. Eff. at 7d. per lb.

GREAT REDUCTION!

NEW AMERICAN OIL OF PEPPER-

MINT, NOT deprived of its Menthol, 8s. 9d. per lb.

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8-oz. Capsuled E. I. Mustard Seed Oil, branded "Star of

India" on Capsule, bottle ... 8/9 per doz.

4-oz. Capsuled ditto, ditto ... 5/6 " "

28-lb. tins Dalmatian Insect Powder ... 1/2 per lb.

56-lb. tins Chilian Honey ... -/3 " "

10-lb. tins Super Ess. Lemon ... 5/6 " "

7-lb. pottle P. Rhel E. I. Elect ... 3/- " "

56-lb. Bale Senna T.V. ... -/3½ " "

4½-gallon tins finest non-freezing Norweglan

Cod Liver Oil ... 4/6 per gal.

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barrel, bright and clear as COLZA OIL—1s. 6d. per gallon (for Hair Oil, &c.); sample 9-gallon tin for 15s.

40-lb. tin Baseline Petro. Jelly (firmer than

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(Best Ointment and Pomade basis.)

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Vermin Killer, with "Poison Register," for 10/6.

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This applies only to stock in hand prior to January, 1889.

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TRADE MARK.



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TRADE MARK



The BEST and SAFEST REMEDY for all Affections of the THROAT, CHEST, LUNGS, COUGHS, ASTHMA, SORE THROATS, BRONCHITIS, CATARRH, CONSUMPTION.

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AND ALL OTHER GRANULAR PREPARATIONS.

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See that this preparation bears our name.

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EXCELLENCE OF OUR GOODS.

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COVENT GARDEN MARKET, LONDON,

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2½% Thallin Sulphate	..	(7 in.)	2/6, 5/6, and 17/6	per box
5% "	"	"	2/9, 5/6, and 18/6	"
2½% "	"	and 10% Cocaine	3/9, 7/6, and 30/	"
5% "	"	and 10% Cocaine	4/6, 8/6, and 33/	"
5% Iodoform	..	"	2/9, 5/6, and 18/6	"
10% "	..	"	3/6, 7/6, and 22/	"
2% Nitrate of Silver	..	"	2/9, 5/6, and 18/6	"
5% Tannic Acid	..	"	2/9, 5/6, and 18/6	"
5% Zinc Sulphate	..	"	2/9, 5/6, and 18/6	"

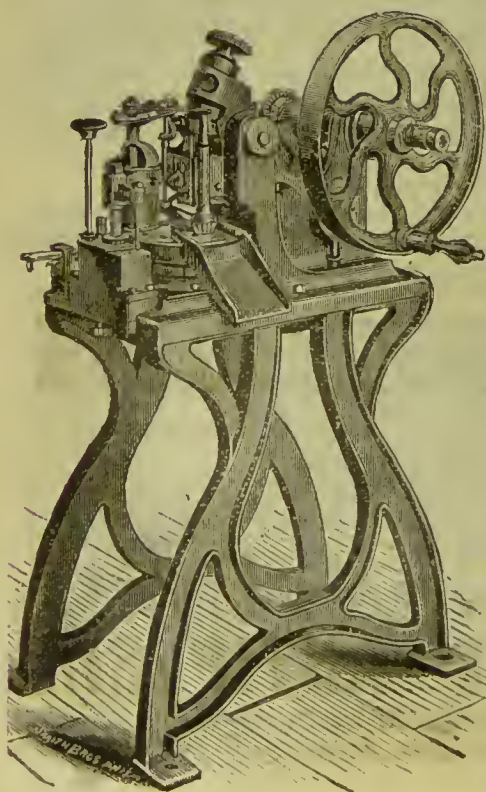
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Syrup of Hypophosphite of Soda,

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Price, 4 francs per Bottle in France.

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Price, 2 francs per Box in France.

Dr. CHURCHILL, author of the discovery of the curative properties of the HYPOPHOSPHITES in Chest affections, recommends none but those prepared by

SWANN, PHARMACIEN, PARIS.

Each Bottle bears Dr. Churchill's Signature and Swann's Trade Mark
SWANN, 12 RUE CASTIGLIONE, PARIS.

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Technically Pure, in Crystals and Powder, of best quality only; also Chemically Pure;

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The Chemist and Druggist of Australasia.

NOVEMBER 1, 1888.

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Editorial Notes:—"Pharmaceutical Legislation in New Zealand"; "The Pharmaceutical Society of New South Wales"; "The Rights and Duties of Unincorporated Societies"; "The Midland Pharmaceutical Association of New Zealand"; "Veterinary Surgeons in Victoria"; "The Adelaide Price List"; "The Aim of Study"; "Early Closing"; "The Laws Affecting Pharmacists."

COLONIAL REPORTS.

New South Wales.—Pharmacy Board (Official Report); Pharmaceutical Society (Monthly Council Meeting); Trade Matters; and General Information.

New Zealand.—Pharmacy Board (Official Report of Conference held in Christchurch, September 27 and 28, 1888); Midland Pharmaceutical Association (Official Report of First Annual Meeting); Question of Liability for Wages.

Queensland.—Pharmacy Board (Official Report); General Meeting of Brisbane Chemists to arrange a Price List; Local News; Trade Changes; The New Tariff; Copy of The Sale and Use of Poisons Act, 1888; How Poisons Acts are Passed.

South Australia.—Pharmaceutical Society (Official Reports of Monthly Council and General Meetings); Unexpected Procrastination and the Pharmacy Bill; Trade Topics.

Tasmania.—The New Tariff (table of duties); The Vaccination Act; Trade News of Hobart, Launceston, &c.; Poison Licenses.

Victoria.—Pharmacy Board and Pharmaceutical Society; Bendigo Science Society; Veterinary Surgeons Act, 1887, Regulations; General News.

Correspondence.—Reciprocity of Pharmaceutical Diplomas; Candidates should be allowed to pass in one subject at a time. Dispensing Notes; Levigation; Doctors' Prescribing.

"Central America"—(a Paper by Mr. J. L. Colledge), read before the Midland Pharmaceutical Association of New Zealand.

"The Caspian Oil Springs and the Russian Petroleum Industry"—(A Paper by C. S. Hill), read before the Pharmaceutical Society of South Australia.

"Botanical Terminology"—(the subject of a Paper by Baron Ferd. von Mueller, K.C.M.G., F.R.S., &c.), read before the Royal Society of New South Wales.

What Country Chemists can do; Student's Corner; Trade Notes; Births, Marriages, and Deaths; Trade Marks applied for; Insolvencies and Sequestrations.

(Copies may be obtained at the London Office, 42 Cannon Street, E.C., 6d. each, or the journal will be supplied to subscribers to THE CHEMIST AND DRUGGIST at 5s. per annum.)

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THE CHEMIST AND DRUGGIST, October 6, says:—"The book is cleverly compiled, and the proposal is one which is likely to be acceptable to a good many chemists."

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METHYLENE.

Obtained by the action of Metallic Zinc on Chloroform and Alcohol.
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PREPARED BY THE SWISS MILK CO., ST. GALL, SWITZERLAND.

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The cheapest, purest, and most nutritious of all similar productions.

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Boxes ready made up, or the Patent Tops only (ready for making up), are supplied.

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THE NEW TIN BOXES are as cheap as the ordinary Boxes, require no soldering up, and can be opened with a penny piece.

THE NEW TIN BOXES are being adopted by the largest Food-preserving Houses and CHEMISTS, to whom references can be given.

THE NEW TIN BOXES are also perfect for Tea and Coffee Canisters, Biscuit Boxes, Confectionery, Paints, Oils, Varnishes, Soaps, &c.

THE NEW TIN BOXES are described by the *Times*, *Standard*, *Chronicle*, *Illustrated News*, *Engineer*, *Grocer*, *Oil and Colourman*, and Press generally, as the "neatest and most elegant invention ever made."

CAUTION.

IN THE HIGH COURT OF JUSTICE, CHANCERY DIVISION.

GRIFFIN v. NOAKES. 1887. G. No. 1,088.

GRIFFIN v. FRAVER. 1887. G. No. 1087.

As we understand from some of our Clients that, from false representations made, an impression prevails that the proceedings in these actions have failed, we beg to inform the public that such is not the fact, and that the proceedings are being carried on as fast as possible, in the Chancery Division of the Court, to restrain the Defendants from selling or making Tins similar to those manufactured by us, and from infringing our Patents. The Defendants, pending the proceedings, have been ordered by the Court to keep an account of all sales made by them. Our Solicitors, Messrs. CLARKSON, GREENWELL & Co., have had instructions from us to proceed against all persons so offending.

FOR THE SELF-OPENING TIN BOX COMPANY, G. FEATHERSTONE GRIFFIN, Manager.

S.V.R.

S.V.R.

PURE GRAIN SPIRIT 56 O.P. ... 18/5
Do. Do. DOUBLE DISTILLED 18/9

Cash with Order. Reductions for Larger Quantities than Two Gallons.

SAMPLES FREE.

STEPHEN SMITH & CO., BOW, LONDON, E.

SPECIALITY FOR PERFUMERY.

This pure grain spirit, which has been thrice rectified and filtered through charcoal, is being largely used in making high-class Perfumes.

Price, 19/-, 56 o.p.; 19/6, 60 o.p. Cash with order.

Reductions for Larger Quantities than Two Gallons.

STEPHEN SMITH & CO., BOW, LONDON, E.



GOVERNMENT DISINFECTANT

CARBOLIC POWDER (PINK) in 1 Cwt. 2 Cwt. CASKS 1lb & 1/2 Packages
 CARBOLIC POWDER (PINK) in TINS 6d & 1/-
 CARBOLIC FLUID in 6d & 1/6 STOPPERED BOTTLES
 CARBOLIC SOAP No 1 & No 2
 CARBOLIC & GLYCERINE SOAP in 1/4 lb. TABS

FREE FROM POISON AGREEABLE IN SMELL.

THE GOVERNMENT SANITARY CO.,
LONDON E.

TO BE HAD FROM ALL WHOLESALE DRUGGISTS.



METHYLATED SPIRIT & FINISH

Supplied of the best quality in wholesale quantities by

J. & W. HARVEY & CO., Distillers, Yoker, GLASGOW.

LONDON AGENTS—JAMES CHAMBERS & CO., 23 BIRCHIN LANE, CORNHILL, E.C.



We distil pure oil of Eucalyptus GLOBULUS as a by-product in the manufacture of our Eucalyptus Boiler Fluid, and are, therefore, enabled to place it in quantities at a lower rate than has heretofore been asked for it.

DOWNIE B. I. P. CO.

4 REDCROSS STREET, LIVERPOOL;

And 204 MARKET STREET, SAN FRANCISCO.

Trade Mark.



Registered.

THE ASSOCIATION for the SUPPLY of PURE VACCINE LYMPH,

12 PALL MALL EAST, LONDON, S.W.

SOLE AGENTS FOR DR. WARLONT'S CALF VACCINE.

Tubes, 2s. each; Half Tubes, 1s. each. Pomado in vials, 6s.
 HUMAN VACCINE, from healthy children only, microscopically examined and source quoted. Tubes, two-thirds full, 1s. 6d. each; Tubes one-third full and Lancet-charged Points, 1s. each; Pin-points, 1s. 1d. each. Eighteen charged Small Points, 6s. Tubes, two-thirds full (same as those mentioned above, but without source), in quantities for export, 25 per 100 Tubes. Pin-points uncharged, 1s. per dozen. Vaccine Ejectors 1s. 3d. each, including postage. Vaccinations by appointment. P.O.O.'s (including postage, and crossed London and Westminster Bank), with orders, payable to
 EDWARD DARKE, Secretary.

Office hours, 10 to 4; Saturdays 10 to 2.

PURE SPIRITS OF WINE.

60 o.p., 19/9 per gall.; 56 o.p., 19/3 per gall.

1/ per Gall. Discount for Cash with order.

Further allowance for quantity. STEAM STILL'S ONLY.

GEORGE PHILLIPS & CO.,
ST. ANDREW'S DISTILLERY, CLERKENWELL RD.
LONDON, E.C.

DR. RENNER'S ESTABLISHMENT FOR
VACCINATION WITH CALF LYMPH,
186 (late 228) Marylebone Road, London, N.W.

VACCINATION FROM THE CALF DAILY FROM 11 TO 12 O'CLOCK.

Reduced price of Calf Lymph (daily fresh).

Tubes	Large	...	...	...	2s. each, or 3 for 5s. 6d.
	Small	...	...	...	1s. " " 2s. 9d.
Points	Large	...	...	...	1s. " " 2s. 6d.
	Small	...	...	...	9d. " " 2s.
Squares	...	...	...	...	2s. 6d. each.

Registered Telegraphic Address—"VACCINE LONDON."

Sent on receipt of remittance addressed to the Manager of the Establishment. Discount to the Trade.

SPECIAL WHOLESALE LIST
OF
HOSPITAL REQUISITES
MANUFACTURED BY
THE ARGYLE RUBBER CO.
60 BUCHANAN STREET, GLASGOW.

PLEASE COMPARE THE FOLLOWING PRICES WITH THOSE YOU ARE NOW PAYING.

WATER BEDS.				POROUS DITTO.			
Best Quality Beds, Cushions, Pillows, Bottles	5/6 per lb.	2½ in. wide—5	7½	10½	15	21 feet.	
(A full size Bed—72 x 36—costs about £5 10s.)		2/-	3/-	4/-	6/4	8/4 each.	
		3 in. wide—2/4	3/8	4/6	6/8	9/-	"
SHEETING.				WEB ELASTIC BANDAGES.			
Single Texture Sheetling (Rubber on one side only) ..	1/6 per yard.	2 in.	2½ in.	2½ in.	3 in.	3½ in.	
Double-Faced "Hospital" Sheetling (Rubber on both sides) 2/-	"	Soft Brown ..	5d.	6d.	7d.	8d.	9d. per yard
Ditto, ditto, super. quality	2/6 "	Strong or Tourniquet	8d.	9d.	11d.	1/2	1/4 "
Pink Jaconet	1/10 per yard (for not less than 20 yards).						
GUTTA PERCHA TISSUE.				SPLINTING.			
Hospital Quality	5/- per lb.	Gooch's Splints, all sizes				8/6	per dozen pairs.
For 50 lbs. or more	4/9 "	Ditto, in Sheets				9/-	per square yard.
		Ditto, in Pieces, 11 by 35 in. ..				2/-	per piece.
MARTIN'S BANDAGES (with Tapes).				ENEMAS.			
2½ in. wide—5	7½	10½	15	Ingram's Seamless Enemas, complete in boxes ..	32/-	per dozen.	
1/4 ..	2/-	2/8	4/-	Warne's Patent, ditto	36/-	"	
3 in. wide—1/8 ..	2/8	3/4	5/-	Best Disconnecting, ditto	36/-	"	

List of Surgical Instruments, &c., on application. Samples of Sheetling, &c., on application.

Telegraphic Address:—"MAGNUS GLASGOW."

M. M. P. FRASER, Proprietor

NOW READY.

J. SANGER & SONS'

ADDENDA TO PRICE CURRENT,

Containing all the Newest Proprietaries
and most recent prices.

SENT, POST FREE, ON RECEIPT OF
BUSINESS CARD.

J. SANGER & SONS, 489 OXFORD STREET, LONDON, W.



Inspect our well-assorted Stock of
DRUGGISTS' SUNDRIES, PERFUMERY,
LOZENGES,
MINERAL WATERS, &c.
PRICES COMPARE FAVOURABLY WITH OTHERS.

AGENCIES OF ALL KINDS UNDERTAKEN
ON FAVOURABLE TERMS.

KEARSLEY'S Widow Welch's FEMALE PILLS.

These are universally acknowledged to be the Genuine, and Druggists may safely recommend them.

CAUTION!

The Proprietors of Kearsley's Original Widow Welch's Female Pills find it incumbent on them to caution the purchasers of these Pills against various imitations by parties who have no knowledge of their peculiar preparation, the Original Recipe having been sold to the late G. Kearsley, of Fleet Street, whose Widow found it necessary to make an affidavit, for the protection of her property, in the year 1798. The Genuine Recipe for Widow Welch's Female Pills has been prepared by them for 100 Years! Chemists are particularly requested to remark that, as a testimony of authenticity, each bill of directions contains an affidavit, and bears the signature of "C. KEARSLEY," in writing, also engraved on the Government Stamp, and each box is wrapped in WHITE paper.

Price 27s. per Dozen, subject to usual Discount. Special Quotations to Shippers and for large quantities on application to

J. SANGER & SONS 489 OXFORD STREET, LONDON, W.

SPECIAL.**INDIARUBBER POROUS PLAISTERS**

Manufactured by WILLIAM MATHER.

REDUCTION OF PRICES.

STRENGTHENING	...	...	...	...	2s. per dozen.
BELLADONNA	...	...	...	...	2s. „
CAPSICUM	...	...	...	...	2s. „

Subject to Discount, as per Price List.

WILLIAM MATHER,

Proprietor of the Royal Balsamic Plaisters and other Specialities,

DYER STREET, HULME, MANCHESTER.

London Agents—MACE & HALDANE, 94 Milton Street, E.C.

B. NOAKES & CO.

142 SPA ROAD & DOCKLEY ROAD, BERMONDSEY, LONDON, S.E.

METALLIC CASK MANUFACTURERS & TIN-PLATE WORKERS.

STEEL BARRELS,

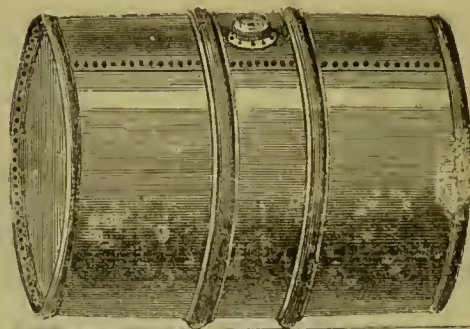
Capacity 40 to 120 Gallons,

AS PER ILLUSTRATION.

IRON KEGS, IRON DRUMS,

SUITABLE FOR

All kinds of Chemicals, Varnishes,
Paint, Spirit, &c.



These large Steel Casks, similar to sketch, can be handled with equal facility to wooden barrels, and, owing to their strength and durability, can be used over and over again for an indefinite period. They are perfectly liquid tight, being tested at a very high air pressure, and, unlike wood, do not absorb any of the contents. They are all fitted with interchangeable screw bungs, and can also be fitted with screw plug in head, for draw off tap.

They are specially adapted for all kinds of Chemical Products, Sulphuric Acid, Glycerine, Spirits, Oils, Turpentine, Petroleum, Benzoline, Varnishes, Tar, Naphtha, Mineral Extracts, and Inflammable Liquids of every description.

We are making them in three qualities, "Black Steel," "Lead Coated," and "Tinned."

Telegraphic Address—"NOAKES LONDON."

PRICE LIST ON APPLICATION.

NOAKES' PATENT LEVER TINS.

AIR-TIGHT TIN.
NOAKES' PATENT.



Opens without a Knife.
"The invention is one of the most important of the day."—*The Store-keeper*, 27th January, 1888.

Eminently suitable for packing
MIXED
PAINTS,
SYRUPS,
FRUITS,
CREAM,
HONEY,
JAMS, &c.



Patent Rings, Lids, and Bottoms, supplied loose for Export, or for Firms making their own Tins.

Levering open with a Coin.
NOAKES' PATENT.



Eminently suitable for packing
CONFEC-
TIONERY,
DRUGS, TEA,
POWDERS,
&c.

Closes without Solder.

"A Tin which can safely be recommended to the attention of packers."—*The Grocer*, 30th July, 1887.

THE NEATEST TIN.

THE MOST AIR-TIGHT TIN.

NO SHARP EDGES.

NO CUT FINGERS.

"Possesses important advantages over others of a somewhat similar kind."—*British Trade Journal*, 1st July, 1887.

NO SOLDER USED.

NO KNIFE REQUIRED.

EASILY OPENED.

EASILY CLOSED.

EVERY OTHER DESCRIPTION OF BOX FOR CHEMISTS

Such as Decorated Tin Lozenge & Tooth Powder Boxes, Round, Square, or Oblong, &c.

In the High Court of Justice, Chancery Division.

GRIFFIN v. NOAKES, 1887. G. No. 1188.

PATENT SELF-FIXING LEVER TINS.—The Plaintiff not having yet obtained any Restraining Order or Injunction against us, we are prepared to execute orders for the Lever Opening Tins hitherto manufactured by us, and beg to inform our friends purchasing these Tins from us that we will undertake the entire responsibility of any transaction with us, as the Court made no Order Restraining us from Selling, but only directed us to keep an Account.

WRITE FOR PRICE LIST No. 6.

B. NOAKES & CO., BERMONDSEY, LONDON, S.E.

"DOROTHY" BOUQUET.

MESSRS. H. LONG & SON, Chemists, West Brighton, beg to inform the Wholesale and Retail Trade that they have appointed Messrs. SANGER & SONS, 489 Oxford Street, London, Special Agents for their famed "DOROTHY" Bouquet.

NEWSPAPER EXTRACTS.

"A most charming and decidedly lasting perfume is the 'Dorothy' Bouquet."—*The Lady Newspaper*.

"Quite a delicious perfume."—*Irish Society*.

"Every lady who once uses it will never like to be without a bottle on her dressing table."—*Torquay Standard*.

"A delightful and attractive bouquet."—*Western Morning News*.

"Becoming as popular as 'Dorothy' itself."—*Liverpool Mercury*.

Retail Sizes, 2/1, 3/6, & 6/6, and in 3d. Samples,
ON ELEGANT SHOW CARD.

BATES' SULPHUR SALT

(REGISTERED.)

AND

FRIZZETTA

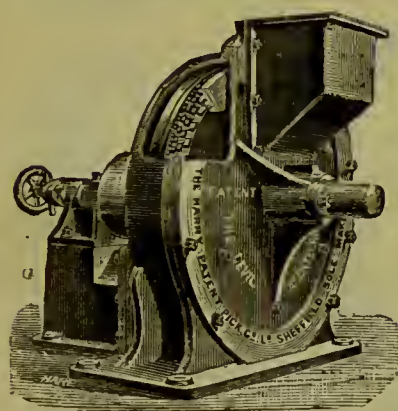
(REGISTERED.)

F. W. BATES, Chemist, Brooks's Bar, MANCHESTER.

Telegraphic Address—"FRIZZETTA MANCHESTER."

SUPPLIED BY ALL PATENT MEDICINE HOUSES.

HAVE YOU SEEN THE "DEVIL" DISINTEGRATOR AND MIXER?



This Machine will Grind to Powder, Granulate, or Shred any Material,
Animal, Vegetable, or Mineral.

CLOGGING ABSOLUTELY IMPOSSIBLE.

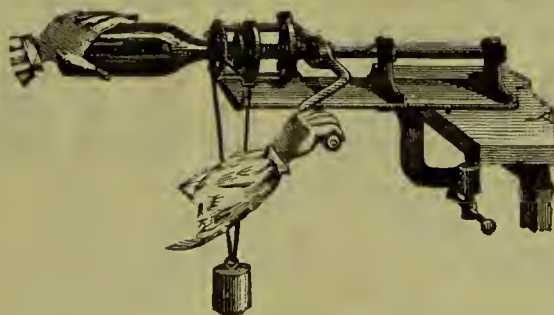
The chief feature of this Grinding Machine is that it combines the centrifugal with the grinding action, and it can be adjusted to grind to any degree of uniform fineness while in motion. No Screens or Grates are required. Will Grind Wet or Dry Material, Clogging being impossible.

Samples of material forwarded to us may be passed through the Machine in the presence of intending purchasers or forwarded by rail. Larger sizes made to order.

Sole Makers, THE HARDY PATENT PICK CO., Ltd,
Engineers and Mining Tool Makers, SHEFFIELD.

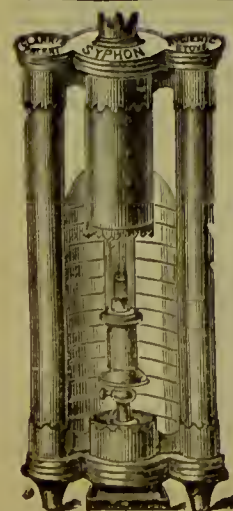
NEW CAPSULING MACHINE

The only Machine
which leaves no crease
or pleat on the
Capsule.



Can be fixed to any
Counter.
A single pull of the lever
is sufficient
to fix the Capsule.

Patentee—C. MELIN, 37 Crutched Friars, LONDON, E.O.



TO CHEMISTS AND DRUGGISTS.

AGENTS WANTED FOR THE SALE OF CLARK'S PATENT

"SYPHON"

(REGISTERED TITLE)

HYGIENIC CONDENSING GAS HEATING STOVES.

NO FIRE REQUIRED. ARE FREE FROM SMELL OR SMOKE.

All injurious vapours are reduced to harmless liquid inside the Stove, and passed out at foot into a tray provided for that purpose.

FOR USE IN HOSPITALS, SICK CHAMBERS, BEDROOMS, HALLS, CONSERVATORIES, CHURCHES, SCHOOLS, ETC.

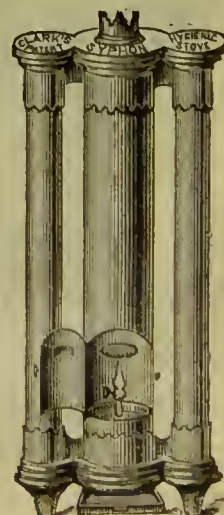
Specially suitable for patients suffering from Bronchial affections, as a moist atmosphere is obtainable when required.

FOR TERMS, PARTICULARS, AND PRICES, APPLY TO

S. CLARK & CO., Patentees & Makers, Syphon Works, Park St., Islington, LONDON, N.

Telegraphic Address:—"SYPHON STOVES LONDON."

Wholesale Agents:—Messrs. MAW, SON & THOMPSON, Aldersgate Street, London, E.C.



40

ORIENTAL AROMATIC SALTS, FOR BATH AND TOILET PURPOSES.



The **ORIENTAL AROMATIC SALTS**, when dissolved, render the water very soft, and impart a most agreeable and refreshing perfume that can be diffused with advantage in a room where the air is close and depressing.

The **ORIENTAL AROMATIC SALTS** strengthen the tissues, perfume and invigorate the body, preserving it from contagious diseases, and cleanse the pores, thus facilitating the cutaneous transpiration so necessary to life.

The **ORIENTAL AROMATIC SALTS** are unrivalled for beautifying and preserving the Skin, rendering it soft and velvet-like; and for keeping the complexion perfectly bright and clear.

They are indispensable in the Bath as well as in the Bedroom, and should be used by everybody.

Sold in Bottles at 1/6. Wholesale of the Patentees and Manufacturers—

S. TRAVADO & CO., 27 Jewry St., E.C., LONDON.

To be had also of Messrs. BREIDENBACH & CO., Perfumers to the Queen,
157b NEW BOND STREET, W

WHITE AND SOUND TEETH.

JEWSBURY & BROWN'S

ORIENTAL TOOTH PASTE.



This old-established and increasingly favourite Dentifrice has been over Sixty Years before the Public. It is warranted to retain its properties and keep in good condition in any climate. The original and only genuine is manufactured solely by

JEWSBURY & BROWN, Chemists, MANCHESTER,

and is distinguishable by the Trade Mark, printed in red and green, a facsimile of which is annexed. Particular attention should be paid to this guarantee of genuineness, as numerous imitations are offered. Sold universally by Chemists and Perfumers, at 1s. 6d. and 2s. 6d.

The Trade and Shippers supplied by the leading houses in London and elsewhere. Bills and Show Cards forwarded on receipt of address cards and directions for enclosure.

BRECKNELL'S SKIN SOAP

Recommended by the late Sir Erasmus Wilson and other eminent Medical Men, and is
THE BEST FOR PRODUCING A CLEAR AND HEALTHY SKIN.
PRIZE MEDAL.

BRECKNELL'S SADDLE SOAP

Used in the Royal Stables, by the Army, and in Hunting Establishments.
THE BEST THING MADE FOR CLEANING SADDLES.
PRIZE MEDAL.

BRECKNELL, TURNER & SONS,
TO THE QUEEN, HAYMARKET, LONDON.

PURE OTTO OF ROSE, SPECIALITY OF SHIPKOFF & CO. DISTILLERS AND EXPORTERS, KIZANLIK, BULGARIA.

Agent for Great Britain—G. P. BAKER, 19 Ivy Lane,
LONDON, E.C.

THE OTTO OF ROSE which this house distills and exports is known above all by the absolute purity of its quality and the unexcelled sweetness and strength of its odour. It is guaranteed to be the finest essence produced in the famous Rose Valley of Bulgaria.

Gold Medal, Hygienic Exhibition, Ostend, 1888.



This entirely new and excellent health-giving preparation softens the water, gives it a most delicious odour, and beautifies the complexion in an extraordinary way. Should be in every bathroom and dressing room. Pasta Mack of all respectable Chemists and Perfumers throughout the world. Beware of Worthless Imitations. See the Trade Mark on every box.

Sole Manufacturer and Inventor, H. MACK, Ulm a/D. [2]
Export from all Wholesale Houses

Wholesale Agents for Great Britain, OSBORNE, GARRETT & Co., London, W.

IMMENSE SALE.

SOLD EVERYWHERE.

WOODS' ARECA NUT TOOTH PASTE,

As used and recommended by Madame
Marie Roze, the Prima Donna.

PRICE, 6d. and 1s. per Pot.

CAUTION.—SEE "WOODS, PLYMOUTH,"
ON EACH POT.

FOR ALL CANINE AILMENTS.

SPRATTS PATENT, LIMITED,

DOG MEDICINES.

Pamphlets on Canine Diseases for gratuitous distribution. Show Cards and Handbills Supplied.

Address: **SPRATTS PATENT, LIMITED, LONDON, S.E.**
OR YOUR WHOLESALE HOUSE.

DISPENSING BOTTLES & PHIALS

We now supply our 6 and 8 ounce Bottles, Clear Blue Tinted,
at **7/6** per gross; also

OUR NEW CRYSTAL BLUE TINTED,
Splendid Colour,

6 and 8 ounce ... **8/9** per gross.

All other sizes equally low. Sample of either kind free on application.

I. ISAACS & CO.

GLASS BOTTLE MANUFACTURERS,

25 FRANCIS ST., TOTTENHAM COURT ROAD,
LONDON, W.C.

Established upwards of 70 years. Bankers—London and Westminster.

GENERAL ACCIDENT BUSINESS

AGENTS WANTED.

Chemists and Druggists invited

TO APPLY TO

**EMPLOYERS' LIABILITY ASSURANCE
CORPORATION, LIMITED,**

84-5 King William Street, London, E.C.



*Used on the Royal Farms at Windsor, Osborne, and Sandringham, and by
the principal Stockbreeders everywhere for nearly 60 years.*



DAY, SON & HEWITT'S

HORSE, CATTLE, AND SHEEP MEDICINES.

THE CHEMICAL EXTRACT.

For assuaging pain and inflammation in all wounds, saddle galls, strains, bruises, swellings and relaxed tendons in Horses. For painting after calving and lambing, and for swollen udders and sore feet.

2s. 6d. per Bottle; 4-dozen Box, 7s. 6d.

THE RED DRENCH.

Celebrated for inflammatory disorders, such as fevers, pleurisy, foot-and-mouth complaints, yellows, surfeit, and red-water. Also for difficult calving and lambing. Admirably adapted for cleansing and checking feverish symptoms in Cows and Ewes after a bad time of parturition.

For Sheep, 3s. 6d.; for Cattle, 13s. per dozen Box.

THE GASEOUS FLUID.

Unmatched for colic or gripes and debility in Horses, for colds, chills, shivering fits, flux and diarrhoea in Cattle, Calves, and Sheep. For Ewes weakly after lambing and blown Cattle and Sheep, its effects are marvellous.

20s. per dozen Box.

THE GASEODYNE.

Used as laudanum in uncontrollable spasmodic pains and violent bowel complaints. Invaluable for parturition in Mares, Cows, and Ewes.

3s. 6d. per Bottle; 4-dozen Box, 10s. 6d.

THE RED PASTE BALLS and RED POWDERS.

For ill-conditioned Horses and Colts; invaluable after hard hunting or driving. For coughs, colds, staring coat, itching, swollen legs and want of strength. The powder given in the feed will produce fine appetite and tone.

7s. 6d. per dozen; 3-dozen Box, 21s.

THE BLACK PHYSIC BALLS.

These Balls are matchless for thoroughly cleansing the system of all impurities, and for assisting in the expulsion of Worms. Their purgative action soon relieves Costiveness of the Bowels, and checks all Feverish Symptoms arising from gross habit.

Price, 8s. per dozen; Box containing 3 dozen, 23s.

THE BRONCHOLINE.

The great and reliable remedy for Husk or Hoarse in Cattle, Heifers, Calves, and Sheep. Its gaseous odour destroys the worm or parasite in the windpipe, removes the hard cough, and soothes the lungs and other organs.

2s. 6d. per Bottle; 4-dozen Box, 7s. 6d.

THE "KEY TO FARRIERY."

A small work published by us on the general ailments of stock, their treatment and cure.

Large Edition, in Cloth, 2s. 6d.; Small Edition, 1s.

	Price
The Stockbreeder's Medicine Chest. No. 1 contains a complete assortment of all our preparations for treating diseases of stock generally.	£6 6 0
The Stockbreeder's Medicine Chest. No. 2 is suitable for ordinary Farm use, and contains a useful selection of the above Medicines.	2 16 6
The Horsekeeper's Medicine Chest. No. 3 is arranged for large Horse Owners, Collieries, &c., and contains 12 specially selected Medicines.	5 5 0
The Horsekeeper's Medicine Chest. No. 4 contains a smaller assortment, but has everything requisite for all ordinary ailments in Horses.	2 17 6

Prepared only by **DAY, SON & HEWITT, 22 DORSET STREET, LONDON, W.**

LIBERAL DISCOUNT TO FOREIGN BUYERS.

LIST AND PARTICULARS OF AGENTS ON APPLICATION.

CARBOLIC POWDER, £4 TON.

1-ton lots and upwards.

CARBOLIC PINK POWDER, 5/-, 7/6, and 10/- per cwt., in bags or casks.

HANDSOME LARGE DECORATED BLACK AND GOLD TIN BOXES,

Holding 1½ lbs. (usual 1½ size), 3/- doz. Ditto, LARGE SIZE (usual 1½ size), holding about double quantity, 4/6 doz.

PALE CARBOLIC ACID, 99 per cent. (No. 5), and CHLORIDE OF LIME below market prices.

CRUDE CARBOLIC ACID (Brown), 9d., 1/-, and 1/6 Gallon; also in patent stoppered bottles, labelled, ½ pint (1½ size), 4/- dozen.

DARK SANITARY FLUID (to be used with 80 parts of water, making a milky fluid), 2/- PER GAL.

10 PER CENT. DISCOUNT OFF ABOVE PRICES FOR CASH WITH ORDER.

All goods delivered free in London or suburbs, or to rail or docks. THE CHEAPEST HOUSE IN THE TRADE.

HAMILTON & CO., HIGH STREET, WANDSWORTH, LONDON, S.W.

"KAMPHORKALK"

A fresh Disinfecting Powder. It is a combination of soluble Chlorides and Camphor.

THE ADVANTAGES CLAIMED FOR IT ARE—

It is free from Poison. It is free from Smell (except a slight odour of Camphor). It is Soluble in Water. It is White in Colour. It is not injurious to any fabrics. It is Effectual and Cheap.

EXTRACTS FROM REPORTS.

Professor WANKLYN says:—"It is a most powerful disinfectant."

Professor REDWOOD says:—"I have made several experiments for the purpose of testing the efficacy of 'Kamphorkalk' (Cooper's Camphorated Disinfectant), and am satisfied that it possesses the properties claimed for it, and that it may with advantage be used in cases where infective disease prevails; and for arresting the decay of animal or vegetable matter from which noxious effluvia may emanate."

Sold retail in pretty decorated Canisters, 2 lbs., 1/-; 6 lbs., 2/- each. In 28-lb. Kegs and 1-cwt. Casks much cheaper in proportion.

Special Wholesale Agents—Messrs. Sanger & Sons, 489 Oxford Street, London.

Proprietor and
Manufacturer—

ALFRED HORNBY, RICHMOND, SURREY.

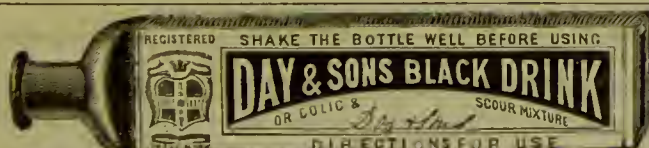
ESTABLISHED
NEARLY
50
YEARS.

DAY & SONS'

WORLD-FAMED HORSE AND CATTLE MEDICINES.

AWARDED
OVER
30
PRIZE
MEDALS.

THE LARGEST SALE IN THE WORLD.



FOR Colic or Gripes in Horses and Cattle.
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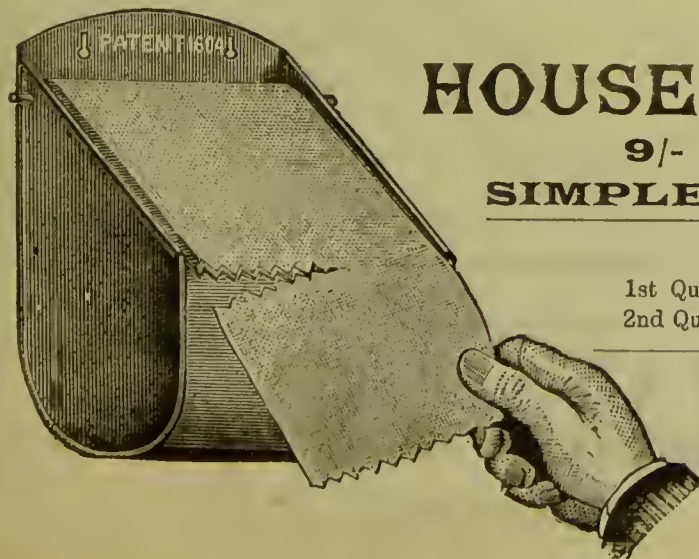
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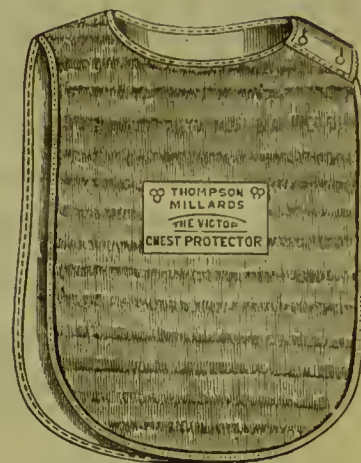
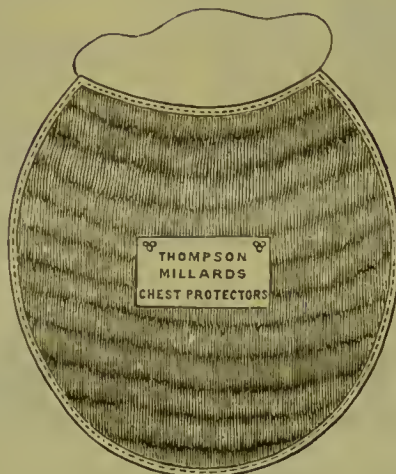
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